An Examination of the Role of Astrological Images in Aby Warburg's *Bilderatlas Mnemosyne* (1929) in an Analysis of Three Panels (Panels 23a, 24, and 50-51)

Emily Robinson

Student Number: 106481

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Table of Contents

Table of Contents …. 3

List of Figures …. 4

Acknowledgements. 7

Abstract. 8

Introduction . 9

Methodology: A Philosophical Lens. 17

Warburg and Astrology. 20

Literature Review . 30

Analysis and Discussion of Panels. 44

Panel 23a titled '*Regular body as a micro-universe for determining fate by the throwing of dice. Leafing through a book as reading the universe (book of fortune, Lorenzo Spirito). [Books on geomancy missing] Lorenzo Spirito = link to the North. Conception of Fortuna with her wheel as ineluctable fire'*. 47

Astrological Dodecahedrons and Amulets. 48

Fortune-telling Books. 52

Panel 23a Analysis Summary. 61

Panel 24 titled '*Theory of planetary filiation. (The North?) Theoretical basis for practice'*. 63

Panel 24 Analysis Summary. 68

Panel 50-51, titled '*Subdivision and making handleable. Muses. Virtues and Vices. Harmonic system. Ascent. Female funerary dancers'*. 70

Tarocchi, Tarot . 71

Panel 50-51 Analysis Summary. 78

The Role of the Astrological Image, as Revealed via Panel Analysis. 80

Conclusion. 82

Bibliography. 91

List of Figures

Figure 1. Aby Warburg, *Bilderatlas Mnemosyne,* c.1929, photographs on panel board, 120x250 cm, Warburg Institute, London. *Image:* Haus der Kulturen der Welt..... 9

Figure 2. Albrecht Dürer, *Melancholia I*, c.1514, engraving, 24x18.5 cm, Kunsthistorisches Museum, Wien. *Image:* The Metropolitan Museum of Art..... 26

Figure 3. Aby Warburg, *Panel A,* from *Bilderatlas Mnemosyne*, c. 1929, photographs on panel board, 120x150 cm, Warburg Institute, London. *Image: engramma*..... 30

Figure 4. Aby Warburg, *Panel B*, from *Bilderatlas Mnemosyne*, c. 1929, photographs on panel board, 120x150cm, Warburg Institute, London. *Image*: *engramma*..... 31

Figure 5. Aby Warburg, *Panel C*, from *Bilderatlas Mnemosyne,* c. 1929, photographs on panel board, 120x150cm, Warburg Institute, London. *Image*: *engramma*..... 32

Figure 6. Aby Warburg, *Panel 23a*, from *Bilderatlas Mnemosyne,* c. 1929, photographs on panel board, 120x150cm, Warburg Institute, London. *Image*: *engramma*..... 44

Figure 7. Aby Warburg, *Panel 24*, from *Bilderatlas Mnemosyne*, c. 1929, photographs on panel board, 120x150cm, Warburg Institute, London. *Image: engramma*..... 45

Figure 8. Aby Warburg, *Panel 50-51,* from *Bilderatlas Mnemosyne,* c. 1929, photographs on panel board, 120x150cm, Warburg Institute, London. *Image*: *engramma.*..... 46

Figure 9. Panel 23a, incorporating (left) *Dice (decahedrons) to cast fate* (left), and (right) *Gnostic solar amulets* (right), from Johannes Chifletius, *Joannes Macarius Canonicus Ariensis Abraxas seu Apistopistus*, c.1657, manuscript illumination, Antwerp. *Image:* Getty Research Institute..... 48

Figure 10. *Helios (Sol)*, c.300 BCE, gold-plated silver phalera, 16.2cm (d), British Museum, London. *Image:* British Museum..... 49

Figure 11. Attr. to Niccolò Fiorentino, *Medal of Giovanna Albizzi Tornabuoni*, c.1485, bronze medal, 7.8cm (d), Staatliche Museen, Münzkabinett, Berlin. *Image:* Alberto Delitala Collection..... 50

Figure 12. *King George V as Neptune*, c.1913-1916, British postal stamp from Barbados, 4.4x2.8cm, British Library, London. *Image:* British Library..... 50

Figure 13. Panel 23a: two images from the middle register depicting an astrological game of dice, incorporating (left, right) *Astrological game of dice* from (attr.) Jean de Meun, *Le plaisant Jeu du Dodecahedron de Fortune, non moins recréatif, que subtil et ingenieux*, c.1560, manuscript illumination, Bavarian State Library, Germany. *Image:* Bavarian State Library, Germany..... 52

Figure 14. Panel 23a: two images from the middle and lower registers depicting (left) Saturn, c.1482, woodcut, 24.3x17.4 cm, Stadtbibliotek Ulm, Germany, and (right) The workshop of Steffen Arndes, Saturn, c.1487, woodcut, Biblioteca Nazionale Marciana, Venice, both from Lorenzo Spirito, Libro Delle Sorti. *Images*: The Warburg Institute Iconographic Database..... 54

Figure 15. Panel 23a: two images from the lower register depicting (left) *Wheel of Fortune* and (right) *Four Kings from the Old Testament*) from Lorenzo Spirito, *Libro Delle Sorti*, c.1482, woodcut, 24.3x17.4 cm, Stadtbibliotek Ulm, Germany. *Images*: The Warburg Institute Iconographic Database..... 54

Figure 16. Aby Warburg, *Panel 59*, from *Bilderatlas Mnemosyne*, c. 1929, photographs on panel board, 120x150cm, Warburg Institute, London. *Image: engramma*..... 56

Figure 17. Aby Warburg, '*Star Prophecy by Lot,'* c.1927, photographs on panel board, Warburg Institute, London. *Image:* Warburg Institute..... 58

Figure 18. '*Star Prophecy by Lot*': three images from the middle and lower registers depicting (left) enlargements of *Four Kings from the Old Testament* from Lorenzo Spirito, Libro delle Sorti, c.1482, woodcut, 24.3x17.4 cm, Stadtbibliotek Ulm, Germany. *Image*: Stadtbibliotek Ulm, (centre) *L'Empereur*, and (right) *Le Pape*, from Tarot of Marseilles, c.1840-1860, 12x7cm, coloured woodcuts. Image: Tarot of Marseilles Heritage..... 60

Figure 19. Panel 24: three images from the left, center, and right columns depicting (left) *The Planet Jupiter and its Children*, from *Kalendarisches Hausbuch of Master Joseph*, c.1402-1475, illuminated manuscript, 28x21 cm, Universitätsbibliothek, Tübingen, (right) *The Rape of Helen*, fifteenth century, illuminated manuscript, Bayerische Staatsbibliothek, Munich, and (lower right) Master of the Housebook, *The Planet Venus and its Children* from *Medieval Housebook*, c.1470-1482, illuminated manuscript, 25x15 cm, private collection, Germany. *Images:* Warburg Iconographic Database..... 63

Figure 20. Central Italy (Florence), *Conversion of Paul the Apostle*, c.1460-70, engraving, whereabouts unknown. Image: The Warburg Institute..... 65

Figure 21. Panel 35: two images from the center and right columns depicting (left) enlargements of *Birth of Venus, Cupid, and the Three Graces*, c.1484, coloured woodcut, 30.5x48 cm, Colard Mansion, Bruges. *Image*: Warburg Iconographic Collection, and (right) *The Sun and its Children*, from the so-called *Berlin Planetary Book*, c.1470, coloured woodcut, 28x20 cm, Staatlichen Museen, Berlin. *Image:* Staatliche Museen. *Panel Image*: *engramma*..... 66

Figure 22. A comparison of (left) *Aion (Sol), Tellus and the Four Seasons*, early third century BCE, Mosaic, Glyptothek, Munich. *Image*: The Warburg Institute, (upper right) Marcantonio Raimondi, *The Judgement of Paris*, c.1510-20, engraving, 28x44 cm, British Museum, London. *Image:* The Warburg Institute, and (lower right) Édouard Manet, *Luncheon on the Grass*, c.1863, oil on canvas, 208x264.5 cm, Musée d'Orsay, Paris. *Image*: Artsy..... 67

Figure 23. Panel 50-51: three images from the second and third registers depicting (left) enlargements of *Maenad and Two Satyrs,* from *Real Museo Borbonico,* c.1824-8, line engraving, Getty Research Institute, Los Angeles. *Image:* Internet Archive*,* (upper right) *Erato* and (lower left) *Mercury,* from the Mantegna Tarocchi*,* c.1465, engraving, 17.9x10 cm, British Museum, London. *Image:* The Warburg Iconographic Database..... 70

Figure 24. Panel 50-51, with enlargement of *L'Imperatrice*, from the Tarot of Marseilles, c.1840-60, coloured woodcut, 12x7 cm. *Image*: Tarot of Marseilles Heritage..... 71

Figure 25. *Mars,* from the Mantegna Tarocchi, c.1465, engraving, 17.9x10 cm, British Museum, London. *Image*: Warburg Iconographic Database..... 73

Figure 26. *Le Chariot,* from the Tarot of Marseilles, c.1840-60, coloured woodcut, 12x7 cm. *Image*: Tarot of Marseilles Heritage..... 73

Figure 27. *Venus,* from the Mantegna Tarocchi, c.1465, engraving, 17.9x10 cm, British Museum, London. *Image*: Warburg Iconographic Database..... 74

Figure 28. *L'Amoureux,* from the Tarot of Marseilles, c.1840-60, coloured woodcut, 12x7 cm. *Image*: Tarot of Marseilles Heritage..... 74

Figure 29. *Jupiter,* from the Mantegna Tarocchi, c.1465, engraving, 17.9x10 cm, British Museum, London. *Image*: Warburg Iconographic Database..... 75

Figure 30. *Le Monde,* from the Tarot of Marseilles, c.1840-60, coloured woodcut, 12x7 cm. *Image*: Tarot of Marseilles Heritage..... 75

Figure 31. *Saturn,* from the Mantegna Tarocchi, c.1465, engraving, 17.9x10 cm, British Museum, London. *Image*: Warburg Iconographic Database..... 76

Figure 32. *L'Ermite,* from the Tarot of Marseilles, c.1840-60, coloured woodcut, 12x7 cm. *Image*: Tarot of Marseilles Heritage..... 76

Figure 33. Panel 79: two images from the left and right columns depicting (left) enlargements of *Chair of St. Peter*, c. 875, wood and ebony relief, Basilica di San Pietro in Vaticano, Vatican City. *Image*: Taylor Marshall, and (right) detail of cover page of the morning edition of *Tempo 1929*, no. 204 dated 9.3.1929, newspaper clipping. *Image: engramma. Panel Image*: *engramma*..... 80

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Abstract

Left unfinished at the time of his death in 1929, German art historian Aby Warburg's (1866-1929) *Bilderatlas Mnemosyne* was an innovative project that displayed images from 2000 BCE to 1929 CE in various combinations to demonstrate Warburg's new approach to art history that integrated a variety of disciplines. Astrological images featured greatly in his project, appearing on thirty-six of the sixty-three panels, despite Warburg's disavowal of the practice of astrology. This research closely examined three panels, Panels 23a, 24, and 50-51, to determine what role astrological images provided for the *Atlas*. The research surveyed Warburg's writings alongside the images within the *Atlas.* By utilizing a philosophical lens of Gilles Deleuze (1925-1995) and Félix Guattari's (1930-1992) rhizome theory, the panels' astrological images made a web of connections with panels throughout the *Atlas*. The multitude of connections made visible by this lens indicated that astrological images were shown to demonstrate Warburg's concepts for his new art history. Non-astrological images were shown to possess this capability. Further analysis of Warburg's writings revealed that astrological images specifically act as a gauge in which he could assess the socio-psychological status of society throughout history. The astrological images were capable of doing so due to astrology's multivalent and multidisciplinary evolutions over time.



Figure 1: Aby Warburg, *Bilderatlas Mnemosyne,* c.1929, photographs on panel board, 120x250 cm, Warburg Institute, London. *Image:* Haus der Kulturen der Welt.

Introduction

This dissertation analyzes the role of astrological images in German art historian Aby Warburg's (1866-1929) *Bilderatlas Mnemosyne* (Picture-Atlas of Memory) (c.1929). Begun in 1926 and unfinished at the time of Warburg's death in 1929, the final version of the *Bilderatlas Mnemosyne,* hereafter referred to as the *Atlas*, consisted of sixty-three wooden 'panels,' covered with black hessian fabric onto which Warburg and his associates, Fritz Saxl (1890-1948) and Gertrude Bing (1892-1964), attached photographic reproductions of images (Fig. 1).[1] Throughout the project, Warburg was keenly interested in the idea of orientation: not only of man using the cosmos to locate himself in space, but of utilizing a sprawling history of images to orient humanity's psychological and artistic drives over time. [2] The *Atlas* exemplified Warburg's new art

[1] Roberto Ohrt and Axel Heil, 'The *Mnemosyne* and its Afterlife,' trans. by Meredith Dale, in *Bilderatlas Mnemosyne – The Original*, (Stuttgart: Hatje Cantz, 2020), p.13.
[2] Kurt Forster, 'Introduction,' in *The Renewal of Pagan Antiquity*, trans. by David Britt (Los Angeles: Getty Research Institute, 1999), p.25; Dorothea McEwan, 'Aby Warburg's (1866-1929) Dots and Lines. Mapping the Diffusion of Astrological Motifs in Art History,' *German Studies Review,* 29.2 (May 2006), pp.243, 259.

historical approach, which meant to combine the application of anthropology, sociology, philosophy, and psychology to the study of all kinds of artifacts. Claudia Wedepohl, archivist at the Warburg Institute, qualified Warburg as a modern founder of art history due to his expansion of the discipline's bounds.[3] In a 1927 letter to Warburg's family, who funded his research through their banking business, Warburg described the project as a mirror of historical life and 'tool for orienting oneself in the celestial cosmos' through a development of a 'science of orientation in the form of images.' Though the chronological bounds spanned 2000 BCE to 1929 CE, with images sourced from Europe to India, the *Atlas* was part of Warburg's art historical vision that was developed to transcend any such spatial or temporal bounds.[4]

Each panel spoke to various thematic threads within Warburg's prior art historical research. Warburg chose the multi-panel approach to keep the project 'movable,' allowing the panels and images to be rearranged to best portray Warburg's vision.[5] The final version had gaps in the numbering of panels; for example, Panel 8 is followed by Panel 20. It is suggested from Warburg's personal notebook, the *Tagebuch*, that he was attempting to reintegrate or reorganize thematic sequences from prior versions of the *Atlas*.[6] The *Atlas* has a general schema: Panels A to 27 contain images of cosmologies and astrologies from the Hellenistic, medieval Arabic, and Renaissance European eras; Panels 28-29 to 61-64 contain images of Renaissance art and artifacts from the North and South of Europe; a gap in numbering precedes the last set of panels,

[3] Claudia Wedepohl, 'Introduction,' in Aby Warburg, 'From Arsenal to Laboratory. A retrospective look at my life,' *West 86th* 19.1 (Spring/Summer 2012), trans. by Christopher Johnson p.108.
[4] Aby Warburg, 'From Arsenal to Laboratory. A retrospective look at my life,' *West 86th* 19.1 (Spring/Summer 2012), trans. by Christopher Johnson, p.118; Aby Warburg, *Bilderatlas Mnemosyne – The Original*, ed. by Ohrt and Heil, (Stuttgart: Hatje Catz, 2020); Claudia Wedepohl, 'Introduction,' p.108.
[5] Claudia Wedepohl, 'The Making of Warburg's *Bilderatlas Mnemosyne,*' in *Bilderatlas Mnemosyne – The Original*, ed. by Ohrt and Heil, (Stuttgart: Hatje Catz, 2020), p.18.
[6] Wedepohl, 'The Making of Warburg's *Bilderatlas Mnemosyne*', p.18.

70 to 79, which contain images from Baroque art to Warburg's contemporary news media.[7]

During World War II, the *Atlas*'s panels were shipped out of Germany to keep them safe but were lost en route, and the only surviving keys to the work were photographs of the work alongside Warburg's extensive notes in the *Tagebuch*. The first attempts to research and recreate Warburg's *Atlas* began with Ernst Gombrich in the 1930s, who attempted to produce a new version of the *Atlas* but was unable to do so; instead, in the 1970s he wrote *Aby Warburg: An Intellectual Biography*.[8] Art historian and Warburg Institute researcher Dorothée Bauerle is credited with undertaking the first successful research into the *Atlas* in the 1970s and produced the now out of print *Gespenstergeschichten für ganz Erwachsene: Ein Kommentar zu Aby Warburgs Bilderatlas Mnemosyne*. Viennese collective Daedalus utilized Bauerle's research to exhibit a reconstruction of the *Atlas* in 1993 with captions accompanying the images. Art historian Martin Warnke published a version of this *Atlas* through the Warburg Institute with Daedalus' captions in 2000 but noted where errors were made as more information had become available with De Gruyter's publication of Warburg's updated collected works in 2000. In 2012, Hamburg-based Forschungsgruppe Mnemosyne assembled to research and recreate the *Atlas* with original images that Warburg had utilized, which were now housed in the Warburg Institute's archives. They successfully obtained eighty percent of Warburg's original images of the works. This resulted in the 2020 exhibition at Berlin's Haus der Kulturen der Welt (Fig.1) and accompanying

[7] Christopher D. Johnson, *Memory, Metaphor, and Aby Warburg's Atlas of Images*, (Ithaca: Cornell University Press, 2012), pp. 34-35; *engramma*, *Readings and Pathways through Mnemosyne Atlas* (2012), <http://www.engramma.it/eOS/core/frontend/eos_atlas_index.php?id_articolo=865> [accessed 20 August 2021].

[8] Ernst Gombrich, *Aby Warburg: An Intellectual Biography*, (Leiden: Brill, 1970).

catalogue. It is currently considered the first 'complete' publication of Warburg's unfinished *Atlas*.[9]

Within Warburg's prior art historical writings and notes on the *Atlas*, Warburg developed various terms that he utilized in his art historical analysis, five of which are defined below and to which I will be referring in this dissertation: *Denkraum, Pathosformeln, Wanderstrassen, Nachleben*, and *vorgeprägter*.

Denkraum. In the final version of his unfinished introduction to the *Atlas*, he wrote of the role of social memory in the project and that memory 'does not necessarily create *Denkraum,* but rather it intensifies…the tendencies toward calm contemplation and orgiastic abandon.' *Denkraum*, as defined in Warburg's writings on the indigenous American Serpent rituals, is the 'space for devotion or reflection.'[10] Gombrich, in his recreation of Warburg's introductory fragments, defined *Denkraum* as 'thought-space.'[11] Synthesizing these translated definitions, *Denkraum* can be understood as a liminal mental space for thought and reflection.

Wanderstrassen. This word translates to 'pathways,' was utilized by Warburg as a conceptual principle behind the *Atlas*. As noted by Dorothea McEwan, Warburg referred to the pathways as '*Wanderstrassen der Kultur*' (of culture) and '*Wanderstrassen des Geistes'* (of spirit) to explain the intersecting pathways of the minds of different cultures from classical antiquity to the Renaissance.[12] Alongside McEwan, Christopher Johnson wrote of the 'unseen' nature of the intersecting roads of ideas on the *Wanderstrassen* which Warburg attempted to make visual, such as the

[9] Ohrt and Heil, 'The *Mnemosyne*,' p.21.
[10]Aby Warbug, *Schlangenritual: ein Reisebericht*, ed. U. Raulff (Berling: Wagenbach, 1996), p.56; Matthew Rampley, *Remembrance of Things Past: On Aby Warburg and Walter Benjamin*, (Wiesbaden: Harrassowitz Verlag, 2000), p.89.
[11] Ernst Gombrich, 'To *Mnemosyne*: An Introduction to *Geburtstagatlas* (1937),' trans. by Elizabeth Thompson, *La Rivista di Engramma* (153, February 2018), p.77.
[12] McEwan, 'Dots and Lines,' pp.243-244.

cartographic representation of the *Wanderstrassen,* the *Wanderkarten*, on Panel A (Fig. 3), which shows the trade routes on which the ideas and images traveled.[13] Another of Warburg's terms, *Bilderwanderwrung*, was translated by McEwan as the 'journey of images,' and by Matthew Rampley as the 'migration of images,' however, most scholarship uses the term *Wanderstrassen* to encompass both ideas.[14]

Pathosformeln. A major point of Warburg's prior art historical research and one of the consistent themes within all versions of the *Bilderatlas* is Warburg's concept of *Pathosformeln*, which has been translated as follows in the respective cited papers: 'emotive gesture,' 'emotive gestural formulas,' 'emotive expression,' and 'emotive gestural language.'[15] The concept can be understood as patterns of expressive gestures or clear emotions. Warburg used the term to analyze Renaissance paintings which contained human figures; the gestures or expressions were displayed by the expressive movement of the figure's body or face, rather than conveyed through other artistic means, such as color or perspective.

Nachleben. This term, of which 'survival' is the closest translation, originated in the art historical work of Anton Springer (1825-1891); Warburg adopted the term in his research of the *Nachleben der Antike*, or the survival of antiquity, in Renaissance art.[16] Gombrich and Georges Didi-Huberman found that Warburg had intended for the term to

[13] Christopher Johnson, 'Configuring the Baroque: Warburg and Benjamin,' *Culture, Theory and Critique*, 57.2 (July 2016), p.142; McEwan, 'Dots and Lines,' p.251.
[14] McEwan, 'Dots and Lines,' p.243; Aby Warburg, 'Mnemosyne Atlas. Introduction (1929),' trans by. Matthew Rampley, *engramma*, 142 (February 2017), p.8, Sec. D1 par. 12 <http://www.engramma.it/eOS/index.php?id_articolo=3082>, [accessed 29 September 2021].
[15] Aby Warburg, 'Francesco Sassetti's Last Injunctions to His Sons (1907)' in *The Renewal of Pagan Antiquity*, trans. by David Britt (Los Angeles: Getty Research Institute, 1999), pp.249, 262; 'The Emergence of the Antique as a Stylistic Ideal in Early Renaissance Painting (1914)' in *The Renewal of Pagan Antiquity*, trans. by David Britt (Los Angeles: Getty Research Institute, 1999), p.273; 'Dürer and Italian Antiquity (1905)' in *The Renewal of Pagan Antiquity*, trans. by David Britt (Los Angeles: Getty Research Institute, 1999), p.553.
[16] Kurt Forster, 'Introduction,' p.60.

be understood, respectively, as a 'revival,' or 'afterlife,' of antiquity in later images – a reanimation, not a remnant.[17]

Vorgeprägter. The final terms to be defined in this introduction are *vorgeprägter* and *vorprägung*, which were translated by Johnson as 'pre-stamped' and 'pre-stamping' and by Rampley as 'pre-coin' and 'pre-coining.'[18] As Johnson described, this term relates to how Warburg attempted to explain how the motifs of *Pathosformeln* existed in the history of art in Antiquity — how the conditions of memory 'pre-stamped' the meanings of each expression.[19] In an unfinished draft of his introduction to the project, Warburg wrote that the *Atlas* was meant as a collection of *vorgeprägter* images that 'impacted the stylistic development...of the Renaissance.'[20]

Since the project's conception, astrological images were utilized: at first, in a separate set of panels at the end of the *Atlas*, and by the final version, within the introductory panels and throughout the rest of the *Atlas*, even within the non-astrological schemas.[21] Of the final version's sixty-three panels, astrological images, which are defined as images depicting the cosmos, astrological glyphs, and planetary deities, appear on thirty-six of the panels and eleven out of twenty unfinished or preliminary panels as recorded in Haus der Kulturen der Welt's 2020 reproduction of the *Atlas*.[22] This dissertation investigates the role of astrological images in the *Atlas*

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[17] Gombrich, *Aby Warburg,* p. 26; Georges Didi-Huberman, *The Surviving Image: Phantoms of Time and Time Phantoms. Aby Warburg's History of Art*, trans. by Harvey L. Mendelsohn, (University Park, PA: Pennsylvania State University Press, 2017), p.16.
[18] Johnson, *Memory,* p.49-50; Aby Warburg, 'The Absorption of Expressive Values of the Past [Introduction to the Mnemosyne-Atlas] (1929)' in *The Treasure Chests of Mnemosyne: Selected Texts on Memory Theory from Plato to Derrida,* edited by Uwe Fleckner, translated by Matthew Rampley, (Dresden: Verlag der Kunst, 1998), pp.248-52.
[19] Johnson, *Memory*, pp.49-50.
[20] Aby Warburg, 'Mnemosyne Atlas. Introduction (1929),' trans by. Matthew Rampley, *engramma*, 142 (February 2017), p.3, Sec. B1 par. 1, <http://www.engramma.it/eOS/index.php?id_articolo=3082>, [accessed 29 September 2021].
[21] Peter van Huisstede, 'Aby Warburg: Iconographer?' in *The Routledge Companion to Medieval Iconography*, ed. by Colum Hourihane, (New York: Routledge, 2017), e-book, p.213.
[22] Warburg, *Bilderatlas Mnemosyne — The Original,* pp.1-176

through the analysis of three selected panels: Panels 23a, 24, and 50-51. Though scholarship has been undertaken by art historians to analyse the overall themes of the *Atlas*, as Warburg left very little, clear, publishable material on the project, little research has deeply analysed the role of astrological images within the *Atlas*.[23]

In researching the role of astrology in Warburg's *Atlas,* I have chosen to focus on Panels 23a, 24, and 50-51 as a sampling to ascertain Warburg's inclusion of astrology as a major motif. Panels 23a and 24 were chosen from the 'explicit' astrological schema of panels, which appear grouped together based only on shared subject matter, not visual similarity. Panel 50-51, which shares a potential theme of 'fortune-telling' with Panel 23a, was chosen from the Renaissance art schema of panels, and is preceded and followed by panels focusing on the expressive *Pathosformeln* of victory in the work of Mantegna and other Renaissance artists. To have a 'control' and prevent assuming links due to shared themes between Panels 23a and 50-51, Panel 24 was chosen to analyze alongside these panels, despite having no ongoing visual similarity with the preceding Panel 23a. Though Warburg's dismissal of astrological practice will be explored, Uwe Flecker, editor of a collection of Warburg's post-1925 exhibitions, found it 'striking to what extent [Warburg's] guiding question about the human orientation in the world was bound to the research of astrological-astronomical phenomena.'[24] My first attempt at conducting a deep analysis of the panels as siloed examples of Warburg's use of astrological images produced mainly historical information about the respective works, much of which was not available at the time of Warburg's work on the *Atlas.* As observed by scholars Jennifer Zahrt and Allegra

[23] Wedepohl, 'Introduction', p.107.
[24] Uwe Fleckner, 'Parable of the Man in the Sky,' in Aby Warburg, *Bilderreihen und Ausstellungen*, ed. by Uwe Flecker, Isabella Woldt, (Berlin: Akademie Verlag, 2012), p.191.

Iafrate, it was Warburg's research into astrological and divinatory images that later inspired historical research into these topics.[25]

It became clear that the panels were never meant to be analysed without the context of the rest of the *Atlas*, as the images were not only connected to their thematic neighbours, but to seemingly unconnected preceding or following panels. Though the individual panels could be analyzed as the 'part' they played as vehicles for the expression of Warburg's interest in the sociocultural, psychological undercurrents of art that he was using the *Atlas* to illuminate, the images are given depth when connected to the 'whole.' From this realization, I drew a connection between the *Atlas* and the theory of the rhizome, as developed philosopher Gilles Deleuze (1925-1995) and psychoanalyst Félix Guattari (1930-1992) in 1970s France, which I utilized as a methodical lens in my analysis of the astrological image within the *Atlas*. The following section will explicate my methodology and approach to the dissertation.

[25] Jennifer Zahrt, *The Astrological Imaginary in Early Twentieth-Century German Culture,* (Unpublished PhD thesis, University of California, Berkeley, 2012), p.73; Allegra Iafrate, 'Of Stars and Men: Matthew Paris and the Illustrations of MS Ashmole 304,' *Journal of Warburg and Courtauld Institutes,* 76 (2013), p.142.

Methodology: A Philosophical Lens

This dissertation utilizes text and image-based research methods. The primary sources I am using in this research are the 2020 catalogue of the *Atlas,* Warburg's personal letters, and Warburg's scholarly writings, as collected in the Getty Research Institute's 1999 *The Renewal of Pagan Antiquity.* The resources were sourced from the Haus der Kulturen Welt 2020 exhibition, including the purchase of the exhibition catalogue, accessing out of print materials at the Clark Art Institute Library in Massachusetts, and from online libraries accessible by the University of Wales Trinity Saint David. I approach this topic from the cultural perspective of an American woman in her twenties with Irish familial heritage. In approaching this research, I draw from a background of interdisciplinary studies to approach the astrological images in Aby Warburg's *Bilderatlas Mnemosyne*. I am utilizing approaches from art history and critical theory, both of which I trained at an undergraduate level at New York University's Gallatin School of Individualized Study. I am also utilizing astrological knowledge from a practitioner's perspective, having studied the practice since 2017 and receiving my foundations certification from the Faculty of Astrological Studies in 2021.

Due to my training in critical theory, I had a previous understanding of Deleuze's philosophies; beginning in the 1950s, he wrote as a philosopher, and developed his own theories and expanded upon previous philosophical concepts, such as Immanuel Kant's (1724-1804) critique of pure reason within his own metaphysical and logical theories in 1968's *Difference and Repetition*. Deleuze co-authored three books with Guattari, a psychoanalyst, in which they debuted theories, such as the rhizome, and attempted to define the pursuit of philosophy. 1980's *A Thousand Plateaus*, the second volume of their *Capitalism and Schizophrenia* series, introduced the theory of the

rhizome, which was defined as 'an acentered, nonhierarchical, nonsignifying system without a General and without an organizing memory or central automaton, defined solely by a circulation of states' and 'a map...entirely oriented toward an experimentation in contact with the real...the map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification.'[26]

I made a connection between the *Atlas* and the rhizome by observing the interconnections of the panels that seemingly arose without a clear organization or progressive chronology. In light of my observation of this similarity, I discovered recent scholarship that found precedent for establishing a link between Warburg and Deleuze. Further precedents for a philosophical analysis of Warburg's *Atlas* will be explored in the literature review. Philosophical scholars Gustavo Chirolla and Juan Fernando Mejía Mosquera noted that despite there being no reference to Warburg in Deleuze's work, both scholars drew from the work of Friedrich Nietzsche (1844-1900).[27] Nietzsche's influence on Warburg's art historical concepts will be reviewed in the following section. Theorist Simon O'Sullivan cited Warburg's understanding of art as ritual and its magical properties as part of the foregrounding history for Deleuze's approach to art, alongside philosophers Georges Bataille (1897-1962), Walter Benjamin (1892-1940), and Theodor Adorno (1903-1969).[28] As has been asserted by the work of philosophical scholars Georges Didi-Huberman and Maria del Carmen Molina Barea, the Atlas's structure relies on a proto-rhizomatic schema, which defies hierarchical or

[26] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus*, trans. by Brian Massumi, (Minneapolis: University of Minnesota Press, 1987), p.21.
[27] Gustavo Chirolla and Juan Fernando Mejía Mosquera, 'Deleuze and Didi-Huberman on Art History,' in *Art after Deleuze and Guattari*, ed. by Sjoerd Van Tuinen, (Leuven: Leuven University Press, 2018), p.91.
[28] Simon O'Sullivan, *Art Encounters Deleuze and Guattari: Thought beyond Representation*, (London: Palgrave Macmillan UK, 2005), pp.48-49.

chronological logic, and instead focuses on the lateral con[29] This dissertation departs from prior scholarship that connected Deleuze, Guattari, and Warburg by analyzing images on specific panels and identifying their rhizomatic connections in order to verify the rhizomatic structure. Before reviewing the prior literature regarding astrological images in the *Atlas*, I will begin with a further elucidation of Warburg's relationship and research into astrology.

[29] María del Carmen Molina Barea, 'Rhizomatic Mnemosyne: Warburg, Serres, and the Atlas of Hermes' *Contemporary Aesthetics*, 16 (2018), p.3; Didi-Huberman, pp.324, 333.

Warburg and Astrology

Born in 1866 to a wealthy German-Jewish banking family, Aby Warburg was most well-known for his art historical research into the Renaissance and foundation of the Warburg Library. His art historical training resulted in an 1893 dissertation on the *Pathosformeln* of 'intensified outward movement as it was derived from antiquity' in Sandro Botticelli's (1445-1510) representations of Venus.[30] In 1895, he observed the ritual and artistic culture of the New Mexican Hopi people, which ignited his interest in the sociopsychology of 'magical-primitive culture.'[31] His vast collection of books became the foundation of the Warburg Library in Hamburg in 1904, and later evolved into the Warburg Institute in 1926.[32] Warburg's library is organized by topic instead of chronology, and links books based on concepts; as will be observed later, it is similar in organization to the *Atlas*.[33] From the end of 1918 until 1923, Warburg's mental health required a stay at a Kreuzlingen sanitarium, where he continued to write and research, and after which he began work on the *Atlas*.[34]

Though he would not fully engage with the astrological content of Albrecht Dürer (1471-1528)'s *Melancholia I* (c. 1514) (Fig. 2) until later, the first inklings of Warburg's engagement with astrology begin in 1905 when he found the expression of antiquity via the influence of Italian art on Dürer's work. He wrote that this was 'not merely a Dionysian stimulant, but a source of Apollonian clarity,' referencing Nietzsche's concept of the Apollo-Dionysus polarity.[35] This polarity, introduced in 1872's *The Birth of Tragedy*, represented Apollo as that which is visionary and light-

[30] Gombrich, *Aby Warburg,* p.316; Warburg, 'Arsenal,' pp.114-115.
[31] Warburg, 'Arsenal,' p.115.
[32] Fritz Saxl, 'The History of Warburg's Library (1943)' in Gombrich, *Aby Warburg: An Intellectual Biography*, (Leiden: Brill, 1970), pp.325,333.
[33] del Carmen Molina Barea, p.1.
[34] Gombrich, *Aby Warburg*, p.216.
[35] Warburg, 'Dürer and Italian Antiquity,' p.556.

giving, whereas Dionysus is all that is instinctive, demonic, and intoxicating.[36] Nietzsche's philosophies were fundamental to Warburg's understanding of the psychological element of art history, and later, astrology. Warburg interpreted this polarity as logic versus superstition. A second major point of Warburg's research interests become clarified in another 1905 paper in which Warburg cited the research of art historian Friedrich Lippmann (1838-1903). Lippmann identified a clear relationship between Italian engraver Baccio Baldini's (1436-1487) series, the *Planets,* and the German woodcuts of the 'Children of the Planets' (Fig. 18), through which Warburg found that Italy received a reciprocated Germanic influence on their art as early as 1445.[37] His interest in migrating and mutual artistic influences between North and South Europe during the Renaissance became one of the foundational ideas behind the *Wanderstrassen*.

Ron Chernow's history of the Warburg family gave 1907 as the year that Warburg became drawn to the 'study of astrology,' and the way it 'reflected the groping, fumbling way humanity dealt with its existential helplessness in the cosmos before astronomy came along.'[38] Warburg's 1908 papers show the first results of his research into sixteenth century German astrological almanacs and how he used them to highlight the imagery shared with the so-called Mantegna Tarocchi, hereafter the Mantegna Tarocchi, which contained depictions of the planetary deities. Though it was known by Warburg's time that Renaissance artist Andrea Mantegna (1431-1506) had likely not produced the cards, they gained their name through artistic similarities with Mantegna's work. Dürer also produced copies of the Mantegna Tarocchi, as Warburg

[36] Friedrich Nietzsche, *The Birth of Tragedy and Other Writings*, ed. by Raymond Guess and Ronald Speirs, (Cambridge: Cambridge University Press, 1999), pp.7,16.
[37] Aby Warburg, 'Artistic Exchanges between North and South in the Fifteenth Century (1905),' in *The Renewal of Pagan Antiquity*, trans. by David Britt (Los Angeles: Getty Research Institute, 1999), p.275.
[38] Ron Chernow, *The Warburgs: The Twentieth Century Odyssey of a Remarkable Jewish Family*, (New York: Vintage Books, 1994), p.274.

noted; in one 1908 paper, he traced the shared artistic influences across Renaissance Europe produced by these easily handled, printed astrological images. The return of antiquity and medieval stylizations in Renaissance art were part of the artistic trends that Warburg observed in the German and Italian interactions on his *Wanderstrassen*. [39] Another of Warburg's papers from this year identified astrology as a 'consistent iconographic tradition' through which the ancient gods survived in artistic expression. He identified the planetary figures in the Temple Malatestiano in Rimini, which he later featured on Panel 25 of the *Atlas*, the aforementioned German almanacs, Botticelli's *Birth of Venus* as 'recasting medieval illustrative conventions in the light of rediscovered antiquity,' Dürer's *Melancholia I*'s (Fig. 2) 'intimate connection with antique astrological practice,' and the Mantegna Tarocchi as examples of both Southern and Northern Europe utilizing the planetary gods and astrological principles as canvases for *Nachleben der Antike*, the realization of antiquity in Renaissance art.[40] Letters from the public archive of Warburg's correspondence indicate 1908 as the earliest year in which he sought out books on astrology.[41] Chernow also pointed to this year as when Warburg began his research into the tarot. Warburg asserted that they were used to make astrological predictions, perhaps due to the Mantegna Tarocchi's visual similarity to the Tarot of Marseilles, which will be explored in my analysis of Panel 50-51. In 1912, he referred to a tarot deck as 'astrological cards,' although no evidence has been found to support this assertion.[42] In his 1909 paper 'Church and Court Art at Landshut'

[39] Aby Warburg, 'On the Images of Planetary Deities in the Low German Almanac (1908),' in *The Renewal of Pagan Antiquity*, trans. by David Britt (Los Angeles: Getty Research Institute, 1999), pp.593-596.
[40] Aby Warburg, 'The Gods of Antiquity and Early Renaissance in Southern and Northern Europe (1908),' in *The Renewal of Pagan Antiquity*, trans. by David Britt (Los Angeles: Getty Research Institute, 1999), pp.559-560.
[41] Aby Warburg, 'Warburg, Aby to Rosenthal, Jacques 02/10/1908,' in *The Warburg Institute Archive online database*, <https://wi-calm.sas.ac.uk/CalmView/Default.aspx?>, ref. no. WIA GC/10936, [accessed 25 September 2021].
[42] Chernow, *The Warburgs*, p. 274; Aby Warburg, 'Warburg, Aby to Kristeller, Paul 21/09/1909,' ref. no. WIA GC/11119; 'Warburg, Aby to Hecksher, Joseph 04/11/1912,' ref. no. WIA GC/11567, in *The*

Warburg found that a chimney piece in this German town followed the same medieval instructions for the depiction of the seven planetary deities, as did the Mantegna Tarocchi, and he offered 'an example of direct reversion to medieval conceptions in the Renaissance.'[43]

Warburg and Saxl later identified 1910 as the starting point for the resurgence of astrology in Germany as a pre-WWI 'anxiety,' though the war later began in 1914.[44] Warburg himself sent for a horoscope in 1910 from Professor Randolph Roxroy, an astrologer who utilized newspapers advertisements to promote his services.[45] There is no documented evidence as to Warburg's reaction to the accuracy of Roxroy's horoscope, nor a response seeking further services; however, Warburg received a total of eight personalized requests from Roxroy offering his astrological services, even so far as to claim that 'drastic events' were to occur to Warburg as a means of soliciting a response from him.[46] Roxroy also gave Warburg's address to the 'Psycho Success Club,' who sent targeted advertisements to selling secret 'mystic formulae.'[47] In 1912, Warburg found a court case against Roxroy revealing him as a charlatan, but it appears

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Warburg Institute Archive online database, <https://wi-calm.sas.ac.uk/CalmView/Default.aspx?>, [accessed 25 September 2021].

[43] Aby Warburg, 'Church and Court Art at Landshut (1909),' in *The Renewal of Pagan Antiquity*, trans. by David Britt (Los Angeles: Getty Research Institute, 1999), p.561.

[44] Fritz Saxl, 'The Revival of Late Antique Astrology,' *A Heritage of Images*, ed. by Hugh Honour and John Fleming, (Middlesex: Penguin, 1970), p.27.

[45] Randolph Roxroy, 'Roxroy, Randolph to Warburg, Aby 08/10/1910,' ref. no. WIA GC/29398, in *The Warburg Institute Archive online database*, <https://wi-calm.sas.ac.uk/CalmView/Default.aspx?>, [accessed 25 September 2021].

[46] Randolph Roxroy, 'Roxroy, Randolph to Warburg, Aby 16/12/1910,' ref. no. WIA GC/29399; 'Roxroy to Warburg, 20/10/1911,' ref. no. WIA GC/29403; 'Roxroy to Warburg, 15/02/1912,' ref. no. WIA GC/29408; 'Roxroy to Warburg, 09/03/1912,' ref. no. WIA GC/29409; 'Roxroy to Warburg, 21/05/1912,' ref. no. WIA GC/29410; 'Roxroy to Warburg, 04/11/1912,' ref. no. WIA GC/29411; 'Roxroy to Warburg, 06/02/1913,' ref. no. WIA GC/29419; 'Roxroy to Warburg, 25/04/1913,' ref. no. WIA GC/29425, ' in *The Warburg Institute Archive online database*, <https://wi-calm.sas.ac.uk/CalmView/Default.aspx?>, [accessed 25 September 2021].

[47] Elmer E. Knowles, 'Knowles, Elmer to Warburg, Aby 10/01/1911,' ref. no. WIA GC/29400; 'Knowles to Warburg, 17/07/1911,' ref. no. WIA GC/29402, in *The Warburg Institute Archive online database*, <https://wi-calm.sas.ac.uk/CalmView/Default.aspx?>, [accessed 25 September 2021].

he did not pursue this any further.[48] This period was described by Chernow as Warburg's 'fervent campaign against astrological swindlers,' and marked a change in Warburg's approach to astrology in his academic work.[49] Prior to 1912, Warburg's academic regard of astrology was largely unbiased: the most critical comment he made referred to astrological imagery as 'heraldically rigid,' and in 1911, he even undertook his own research into the astrological significance of the astronomical map in the Old Sacristy of San Lorenzo in Florence.[50] Beginning in 1912, however, Warburg's writings revealed a more biased perspective, referring to astrology as: 'that dangerous enemy to all creative invention,' 'the shadowy nether regions of astral superstition;' 'no more than a form of onomastic fetishism;' and 'fallacious, psuedo-mathematical thinking [which] has held sway over people's minds for centuries on end, and still does so to this day.'[51] Comparative Literature scholar Jane Newman found that Warburg's research into astrology linked its resurgence in twentieth-century Germany with Protestant attitudes toward World War I due to his research on astrology during Martin Luther's time that followed this period.[52] Historian Ellic Howe found that 1909 was the first recognizable resurface of astrology in Germany, mainly by the publishing work done by astrologer Karl Brandler-Pracht (1864-1939) and formerly existed as an underground movement in England since the seventeenth century.[53] Though Howe notes that the astrological boom in Germany following 1910 was unrivaled by any other European nation at the time, it should be noted that Warburg experienced a negative shift in

[48] John C. Warburg, 'Warburg, John to Warburg, Aby 06/10/1912,' ref. no. WIA GC/29412, in *The Warburg Institute Archive online database*, <https://wi-calm.sas.ac.uk/CalmView/Default.aspx?>, [accessed 25 September 2021].
[49] Chernow, p.275.
[50] Warburg, 'The Gods of Antiquity,' p.559; Aby Warburg, 'An Astronomical Map in the Old Sacristy of San Lorenzo in Florence (1911),' in *The Renewal of Pagan Antiquity*, trans. by David Britt (Los Angeles: Getty Research Institute, 1999), pp.269-270.
[51] Aby Warburg, 'Italian Art and International Astrology in the Palazzo Schifanoia, Ferrara (1912),' in *The Renewal of Pagan Antiquity*, trans. by David Britt (Los Angeles: Getty Research Institute, 1999), pp.563,566.
[52] Jane O. Newman, 'Enchantment in Times of War: Aby Warburg, Walter Benjamin, and the Secularization Thesis,' *Representations* 105.1 (Winter 2009), pp.133-138.
[53] Ellic Howe, *Astrology: A Recent History including the Untold Story of its Role in World War II*, (New York: Walker and Company, 1967), pp.8,79.

opinion regarding astrology prior to his and Saxl's designation of its popularity as an 'anxiety,' as Warburg and Saxl did not start working together in a serious manner until 1912 at the earliest. [54]

In 1916, Warburg began his research on the astrological trends surrounding Martin Luther (1483-1546). His research hinged on the astrological images in German almanacs and on historical research into the astrologers and astrological information surrounding Luther during his advent of the Reformation.[55] This was the first piece of research where Warburg began to extend his purview outside of the solely art historical use of planetary imagery during the medieval times and into the Renaissance; this paper encapsulated what he later aimed to do with the *Atlas*, as it contained many themes he later revisited. The paper tracked the arrival of astrology into Europe from Baghdad, entering via Toledo and Padua, and making its way into Germany; Newman noted that this, alongside the astrological materials and artistic interpretation, like Dürer's *Melancholia I* (Fig. 2), of which Warburg wrote at length about the representations of Saturnian characteristics and the Jupiterian 'magic square,' are indicative of his concept of the *Wanderstrassen*, showing the pathways of both imagery and thought.[56] Warburg also engaged with his idea of psychological polarities of logic versus the demonic, observing that the Reformation-era astrologer 'accepted these opposite poles of mathematical abstraction and devout self-association [with the stars]' as a 'vibrant, primordial psychic state': 'Logic sets a mental space between man and object by applying a conceptual label: magic destroys that space by creating a superstitious —

[54] Howe, pp.8, 66, 102; Gombrich, *Aby Warburg*, p.192.
[55] Warburg, 'Pagan-Antique Prophecy in Words and Images in the Age of Luther (1920),' in *The Renewal of Pagan Antiquity,* trans. by David Britt (Los Angeles: Getty Research Institute), pp.598-600.
[56] Warburg, 'Pagan-Antique Prophecy' pp. 599, 641-642; Newman, pp. 145-146

theoretical or practical — association between man and object.'[57] Here, Warburg was pointing to astrology's possession of both poles as creating *Denkraum*.



Figure 2: Albrecht Dürer, *Melancholia I*, c.1514, engraving, 24x18.5 cm, Kunsthistorisches Museum, Wien. *Image:* The Metropolitan Museum of Art.

The bulk of the paper focused on Luther's interactions with astrology: Luther was assigned a false birth time and date by an Italian astrologer who wished to use Luther's nativity to associate him with a negative reading of the Jupiter-Saturn conjunction of 1484, rendering him a 'devil.' Luther's own circle, including the astrologer and intellectual Philip Melanchthon, produced a rectification of Luther's nativity with more positive ends.[58] Luther disagreed with both versions of his nativity, as they were incorrect by a year, and as quoted by Warburg, found astrology to be 'manure' and 'unholy drivel.'[59] Luther did not crusade against astrology, and Warburg

[57] Warburg, 'Pagan-Antique Prophecy,' p.599.
[58] Warburg, 'Pagan-Antique Prophecy,' pp.603, 606-608, 612.
[59] Martin Luther, *Tischreden*, Vol.4, (Germany: Weimar), 4, no.613, in Warburg, 'Pagan-Antique Prophecy,' p.607; Martin Luther, *Luthers Tischreden in der Mathesischen Sammlung* (Leipzig: Teubner, 1903), 177, no.292, in Warburg, 'Pagan-Antique Prophecy,' p.607.

observed that Luther's objections were of the practice's intellectual aspects, not its mystical potential due to the shared European medieval fear of natural signs, like the comet featured in Dürer's *Melancholia I* (Fig. 2), and other wonders in the sky.[60] He even found the tool useful in his aims to reform the church by using an astrological prophecy to inspire worry in clergymen and identified the planetary god 'Mercury' as the vehicle for the devil to give his mind worries.[61] Newman found that Warburg's research contributed to early twentieth century debates about the role of religion in the militarized German state, that belief in astrology was compatible with the 'rational' reform based on god's plan, that Dürer's interpretations of Melachthon's astrological knowledge led to Warburg's 'heroic' reading of *Melancholia I* as astrology working hand in hand with mathematical reasoning, and that Dürer's use of astrological symbols and Luther's resistance to altering his birth time as evidence of 'the intellectual freedom of the modern European.'[62] Though this points to a rather positive acceptance on the part of Warburg of the influence of astrology during Luther's time, it is important to note that Warburg closed the paper noting that Edmond Halley's identification of the eponymous comet took away its mystical potential from 'the narrow confines of anthropocentric thought.'[63] It may serve to better understand Warburg's perspective on astrology in the *Atlas* to view his paper on Luther not as an endorsement of the use of Reformation-era astrology, but as Warburg's attempt to present Luther as a corollary to himself. Warburg's own journey with astrology followed a similar path to Luther's: he had dissatisfying interactions with astrologers, found the practice to be intellectually incorrect, but benefited from the understanding of its history and the use of its images as a vehicle to pursue his own intellectual aims.

[60] Warburg, 'Pagan-Antique Prophecy,' p.622.
[61] Warburg, 'Pagan-Antique Prophecy,' p.622, 629-630.
[62] Newman, pp.134, 151-153.
[63] Warburg, 'Pagan-Antique Prophecy,' p.650.

Warburg worked with Saxl to translate the *Picatrix* as early as 1912, an Arabic astrological text that also emphasized the magical aspect of astrology and the use of lapidaries, which correlated magical attributes to stones.[64] Warburg also worked closely with Franz Boll, who first translated Egyptian and Babylonian accounts of the fixed stars in 1903's *Sphaera Barbarica.* From the aforementioned evidence, it is clear that Warburg's intellectual world of astrology was firmly based in ancient beliefs, wherein the practice could also be 'magical,' leading to his understanding of it as such. This was also observed by Zahrt in her unpublished PhD, 2012's *The Astrological Imaginary in Early Twentieth-Century German Culture*.[65] This differed from the practice of astrology that was popular in Germany during this time, which largely drew from Theosophical teachings and utilized astrology for psychological applications, rather than the timing techniques or 'magic' of the ancients.[66] Warburg displayed a knowledge of certain astrological definitions, such as the twelve houses and the Hellenistic and Arab association of the seven planetary deities with the twelve zodiacal signs. He was also aware of artistic differentiations that borrowed from other interpretations, such as Manilius's association of the zodiac with twelve different Olympians instead of their planetary rulers, which inspired the astrological murals within the Palazzo Schifanoia, Ferrara.[67] The combination of conflicting histories of astrological interpretation, his own biases towards the practice, and his differing astrological knowledge from contemporary German astrologers points towards an understanding that Warburg, though utilizing the imagery and history of astrology for his art historical and psychological understandings of medieval and Renaissance era society, did not himself engage with the practice of astrology nor seek to support the practice's academic legitimacy. The next section will

[64] Gombrich, *Aby Warburg*, p.263; Dorothea McEwan, 'Saxl and Boll' (from the Archive Seminar 2008, The Warburg Institute, London, 13 June 2008). *Journal of Art Historiography* 5 (Dec. 2011), p.6.
[65] Zahrt, pp.77-78.
[66] Howe, pp.20,78.
[67] Warburg, 'Italian Art and International Astrology,' p.578.

look specifically at scholars who have focused on astrological images within the *Atlas.*

Literature Review

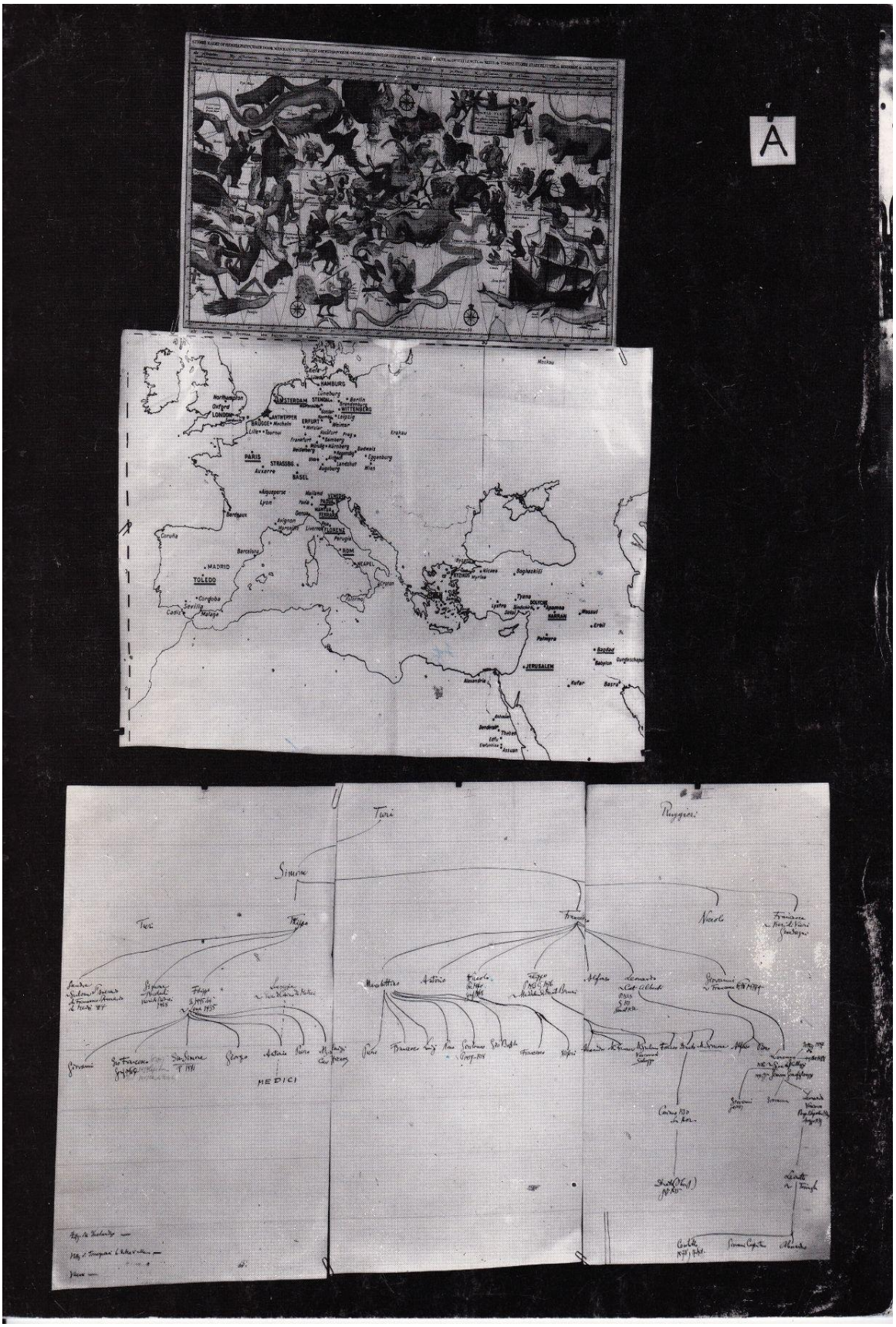


Figure 3: Aby Warburg, *Panel A,* from *Bilderatlas Mnemosyne*, c. 1929, photographs on panel board, 120x150 cm, Warburg Institute, London. *Image: engramma*.

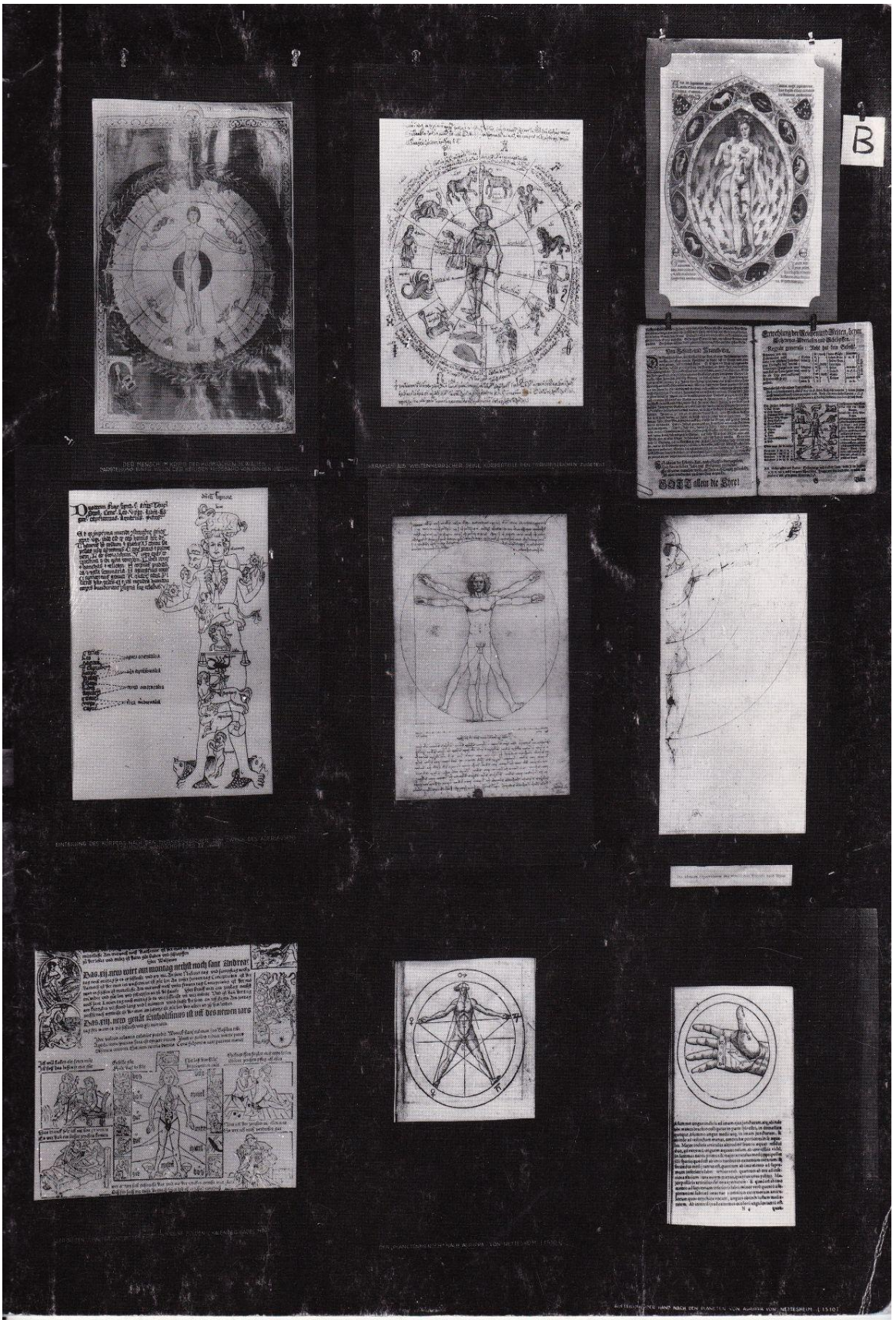


Figure 4: Aby Warburg, *Panel B*, from *Bilderatlas Mnemosyne*, c. 1929, photographs on panel board, 120x150cm, Warburg Institute, London. *Image*: *engramma*.

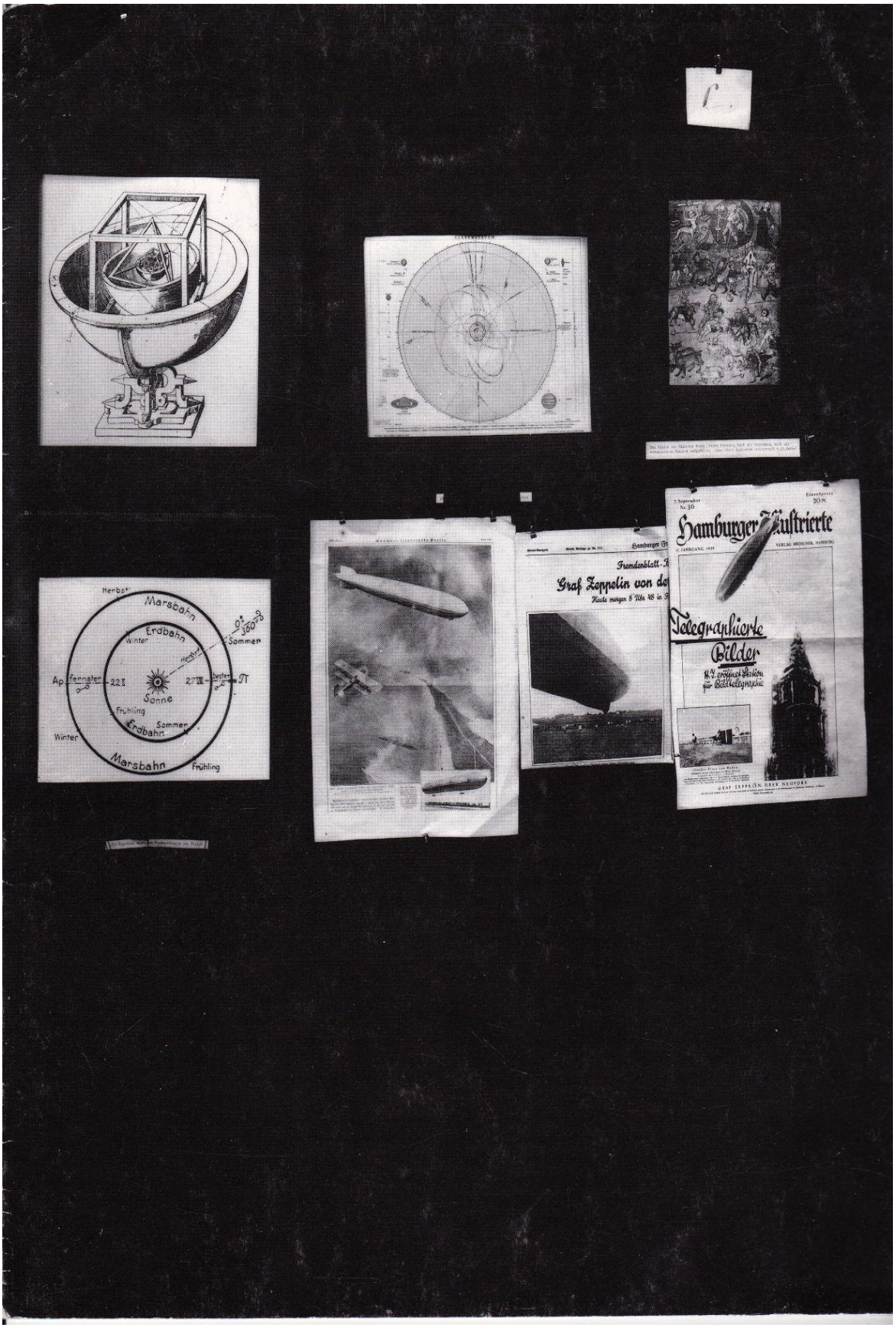


Figure 5: Aby Warburg, *Panel C*, from *Bilderatlas Mnemosyne,* c. 1929, photographs on panel board, 120x150cm, Warburg Institute, London. *Image*: *engramma*

Though much scholarship that analyzes Warburg's writings and research exists, this literature review is narrowed to the scope of writing that specifically regards astrological images within the *Atlas*, the majority of which is centered on Warburg's alphabetic introductory panels. As noted by Claude Imbert, Nima Bassiri, Michael Allan, and Silvia de Laude, these introductory panels were one of the final additions to the *Atlas* and were thought to give an overview of the themes explored in the following panels.[68] Panel A (Fig. 3), titled

> 'Different systems of relationships in which mankind is involved: cosmic, earthly, genealogical. The equation of all these relationships in magical thinking, since separating ancestry, place of birth and cosmic circumstances already presupposes an intellectual feat. 1) Orientation. 2) Exchange. 3) Social classification'

contains three images: a seventeenth century Dutch representation of the constellations; a map of Warburg's *Wanderstrassen*; and the family tree of the Tornabuoni family, an influential Florentine merchant family. Panel B (Fig. 4), titled

> 'Different degrees in the application of the cosmic system to mankind. Harmonic correspondence. Later reduction of harmony to abstract rather than cosmically contingent geometry (Leonardo),'

contains various images of human man within geometrical and zodiacal circles, including pages indicating the medical practice of melothesia, the representation of St. Hildegard of Bingen's (1098-1179) vision of man in the circle of cosmic forces, Leonardo da Vinci's (1452-1519) *Vitruvian Man*, a proportional study of man according to Dürer's instructions, and Agrippa of Nettesheim (1486-1535)'s *The Planetary Man*. Panel C (Fig. 5) is titled 'Education is the conceptualizations of Marrs. Moving away from anthropomorphizing understanding. Image-harmonic system- mankind.' This

[68] Claude Imbert, Nima Bassiri, and Michael Allan 'Aby Warburg, Between Kant and Boas: From Aesthetics to the Anthropology of Images,' *Qui Parle* 16.1 (Summer 2006), p.18; Silvia de Laude, '"Symbol tut wohl!" Il simbolo fa bene! Genesi del blocco ABC del *Bilderatlas Mnemosyne* di Aby Warburg,' *engramma* 125 (March 2015), p.2, <http://www.engramma.it/eOS/index.php?id_articolo=2337/>, [accessed 25 September 2021].

panel contains images of German astronomer Johannes Kepler's (1531-1630) discovery of Mars' orbit, a 'Children of the Planets' woodcut of Mars, and Warburg's news clippings of the Zeppelin's historic 1929 flight around the globe.

Ernst Gombrich's 1970 biography focused on Warburg's prior research to interpret the *Atlas* and identified its thematic 'nucleus' as astrology's transformation of the Olympian gods and antiquity's *Pathosformeln* in post-medieval art and civilization.[69] He took a 'genetic approach,' which identified where Warburg's past work originated the inclusion of specific images *Atlas*.[70] Gombrich highlighted the *Atlas*'s utilization of Nietzsche's Apollonian-Dionysian theory, which aimed to find evidence of the psychology of antiquity through the representation of mythological forms.[71] Gombrich used Warburg's notes to identify the themes of macrocosm-microcosm in Panels A (Fig. 3) and B (Fig. 4) and drew the conclusion of Panel C's (Fig. 5) astrological and astronomical images as progressing from astrology's psychological projection of myth into the sky to rational astronomy and the Zeppelin's scientific achievements.[72] Gombrich did not single out any other astrological panels but identified the use of their imagery as providing orientation, yet refers to the *Libro delle Sorti* and the 'Children of the Planets' series, which are included in Panels C, 23a, 24, among others, as 'base' and 'trivializing' of ancient ideas.[73]

Peter van Huisstede's 1992 PhD thesis undertaken at Leiden University, which focused on Warburg's *Atlas,* was not accessible electronically; in its stead, van

[69] Gombrich, *Aby Warburg,* p.283.
[70] Gombrich, *Aby Warburg,* pp.284-285.
[71] Gombrich, *Aby Warburg,* p.289.
[72] Gombrich, *Aby Warburg,* pp.292, 302.
[73] Gombrich, *Aby Warburg,* p.294.

Huisstede provided me with unpublished work by Warburg.[74] In a 2017 chapter outlining Warburg's work as an iconographer, van Huisstede identified a polarity within Warburg's research on the Renaissance, which pitted astrology against practical, scientific astronomy in their uses of orientation.[75] van Huisstede noted that astrology, specifically, was always included as a 'semantic space' in the *Atlas* and that the introductory panels, added shortly before Warburg's death, were meant to help the viewer identify the later panels' socio-psychological patterns.[76]

Philippe-Alain Michaud's 1998 work approached Warburg's image-based research in terms of its relationship to film and the *Pathosformeln* of motion contained within and among the *Atlas's* images.[77] Michaud cited Panel A (Fig. 3) as representing circular motion between the constellations and the sublunar world, which had created and altered the ways people saw shapes in the stars.[78] Michaud identified tensions in the *Atlas* as arising from the anachronisms of images, as panels would contain and contrast images from different time periods, as clearly evidenced in Panel C (Fig.5).[79] Michaud did not engage with the astrological dimensions of the *Atlas*'s cosmology, as evidenced in his lack of engagement with the zodiacal engravings and planetary deities in his analysis of Panel 25's Temple Malatestiano[80]

Georges Didi-Huberman's 2002 book engaged with Warburg's astrological research to give examples of how Warburg dealt with concepts of time and utilized philosophy to add understanding to Warburg's work. He emphasized the importance of

[74] Personal communication via email, 29/12/20.
[75] van Huisstede, 'Aby Warburg: Iconographer?,' p.210.
[76] van Huisstede, 'Aby Warburg: Iconographer?,' pp.213, 217, 221-222.
[77] Philippe-Alain Michaud, *Aby Warburg and the Image in Motion*, trans. by Sophie Hawkes, (Brooklyn: Zone Books), p.90.
[78] Michaud, p.242.
[79] Michaud, p.37.
[80] Michaud, p.258.

Nachleben in Warburg's astrological research, giving the example of Warburg's discovery of an older Indian astrology in use in fifteenth century Italy as disturbing the linear chronology of socio-cultural history.[81] Didi-Huberman's writing on Panel A (Fig. 3) of the *Atlas* focused on the images of the constellation map and family tree as evoking two periods of time: the family name and the constellation map, which contained the thousands of years of astrological practice, represented an overarching period of time; the individual's name indicated a shorter, insular, and individual experience of time, just as the constellations were used in the individual casting of horoscopes, or 'individual destinies.'[82] Didi-Huberman evoked family relations in seeing Warburg's surviving images as having genealogical resemblance, and he and saw the *Atlas* as investigating 'psychological time,' rather than linear time, as produced through a montage of images, echoing Michaud's research.[83]

Claude Imbert, Nima Bassiri, and Michael Allan's engagement with astrological images in their 2006 paper focused on Panels A, B and C, (Figs. 3-5) and offered many philosophical comparisons of Warburg's work throughout his paper. They found that a traditional understanding of history was not the organizing principle of the *Atlas*, but instead only a motif utilized by the images of the opening panels, and that Warburg sought to disconnect the trappings of history and philosophy attached to the Renaissance by Immanuel Kant, and to create the *Atlas* as a third space of *Denkraum* in which the image is expressive of liminality.[84] Their analysis emphasized the major themes Warburg intended for his opening panels. Panel A (Fig. 3) encapsulated a polarity between 'Athens and Alexandria,' which was a phrase Warburg used to differentiate between centers of 'logical' thought (Athens) and 'demonic-spiritual' practices

[81] Didi-Huberman, p.48.
[82] Didi-Huberman, pp.80-81.
[83] Didi-Huberman, pp.106, 183-184, 202, 318.
[84] Imbert, Bassiri, and Allan, pp.2-3, 7-8, 28.

(Alexandria), which they explored as a proliferation of astrology on the *Wanderstrassen* and in the social history of the Medici family. Panel B (Fig. 4) focused on magic and the fears of the human figure, as emphasized by the desire for control from enlarged human figure 'microcosm' and cited Warburg's understanding of *Pathosformeln* as originating within the reduced geometrical, zodiacal 'macrocosm' as applied to the human body. Panel C (Fig. 5) associated Kepler's images of Mars with German philosopher Ernst Cassirer's (1874-1945) theory of symbolic forms, which theorizes that an image does not die, but is metamorphosed — in this case, into the contemporary images of the Zeppelin.[85]

Warburg Institute fellow Dorothea McEwan's 2006 paper focused only on the various iterations of the *Wanderstrassen* of Panel A (Fig. 3), which tracked centers of trade and astrology from 500 BCE to the fifteenth century to track the flow of astrological images and information over time.[86] Like Imbert, Bassiri, and Allan, she linked this to a Kantian and Cassierian influence.[87] McEwan's paper considered Warburg's study of orientation as 'pathways of the mind' and its transformation of different concepts over time — including the idea of astrology turning into astronomy.[88] McEwan noted that Warburg's research into astrology is a 'paradigmatic example' of his research into social memory. She noted that by tracking the astrological images' journeys over territory and over time, Warburg engaged in the language of cartography.[89] She understood the map as psychogeographical, mapping inventiveness and memory.[90] McEwan ended her paper reasserting that Warburg's cartographic mapping of the images was meant to supply orientation in mapping how the

[85] Imbert, Bassiri, and Allan, pp.20-26.
[86] McEwan, 'Dots and Lines,' p.255.
[87] McEwan, 'Dots and Lines,' p.243.
[88] McEwan, 'Dots and Lines,' pp.243-244.
[89] McEwan, 'Dots and Lines,' p.248.
[90] McEwan, 'Dots and Lines,' p.252.

'rudimentary perception' of astrology was transformed into astronomy, a life 'no longer governed by fear.'[91]

Christopher D. Johnson's 2012 book focused on the *Atlas*, and foregrounded his research with Warburg's prior scholarship, as well as its philosophical influences, including that of Kant and Cassirer.[92] Johnson saw Warburg's interest in astrological images not to be firmly historical, or his interest in Renaissance art to be art-historical: instead, both were examples of Warburg's *Pathosformeln*.[93] From Warburg's notes he identified the theme of cosmological harmony: Panel A (Fig. 3) as the synchronic relationship between humanity and the cosmos, Panel B (Fig. 4) as the macrocosmic-microcosmic analogy, and Panel C (Fig. 5) as scientific abstraction and manipulation.[94] He identified the cartographic language of Panel A and extended the metaphor to the entire *Atlas*: he found that the entire work was meant to act as a map that linked cosmology and artistic expression, and the emergence of scientific objectivity.[95] Johnson took a critical approach and found evidence of a conceit of progress in the tripartite format of Panels A-C, and that there was a theme of non-linear thinking from the astrological images as anachronistic to those that represented social progress.[96] In juxtaposing astrological and astronomical images in the opening panels, Johnson found that Warburg was intentionally creating *Denkraum* for his viewer.[97] He found the *Atlas* to be comparative to Cassirer's symbolic forms' 'tale of progress' with 'no predetermined denouement;' however, this structure towards ever-climbing progress

[91] McEwan, 'Dots and Lines,' p.259.
[92] Johnson, *Memory*, pp.51-52.
[93] Johnson, *Memory,* p.51.
[94] Johnson, *Memory,* p.53.
[95] Johnson, *Memory,* p.33.
[96] Johnson, *Memory,* p.56.
[97] Johnson, *Memory,* p.59.

disregards the *Atlas*'s network of connected images that do not proceed in a clear, linear narrative.[98]

A series of companion papers to Johnson's book, produced from 2007 to 2013, were published as interactive essays by the Warburg Institute. Historian Spyros Papapetros's focused on Panel B (Fig. 4), which he found to represent a two-dimensional circular composition of humanity's relationship to the cosmos.[99] He emphasized that space is both disrupted and rearranged in circuitous reversals and this was central to the thematics of the following panels of the *Atlas*, as its images translate cosmology to stylized figures.[100] He found that each image on the panel shows man's relationship to the cosmos and called it the 'original correspondence' from which the *Pathosformeln* in the *Atlas* arise.[101] Part of this included the abstraction of this relationship through mathematical and scientific laws, as seen in da Vinci and Dürer's sketches.[102] Papapetros indicated that the previous astrological 'regression' again leaves the necessary *Denkraum* to move toward a rational view of man and the cosmos, and that the enclosed circle of earlier representations of man led to the geometrical relationships shown in these images.[103] Papapetros cited Agrippa's studies on proportions as influential to Warburg's studies and drew a link between this line of Warburgian inquiry and his interest in the bodily gestures of figures in art history as indicating larger psychological themes.[104] He also argued that the images of astrological

[98] Johnson, *Memory,* pp.234-235.
[99] Spyros Papapetros, 'Panel B,' *Mnemosyne: Meanderings through Aby Warburg's Atlas* (2013-2016), Intro, p.1, <https://warburg.library.cornell.edu/image-group/panel-b-introduction-1-3?sequence=944> [accessed 25 September 2021].
[100] Papapetros, Intro, pp.1-2.
[101] Papapetros, Intro, p.1.
[102] Papapetros, Intro, p.2.
[103] Papapetros, Sequence 3, pp.1-2.
[104] Papapetros, Sequence 4, pp.2-3.

glyphs on human forms in this panel could be evidence of Warburg alluding to astrology's relationship with *Pathosformeln*.[105]

Claudia Wedepohl wrote a companion essay focused on Panel C (Fig. 5). Wedepohl identified the theme of the panel as the opposition between the belief in the power of the stars and astronomy.[106] Wedepohl credited astrology with already maintaining mathematical skills and saw the inclusion of Kepler as a transitional figure, as he still had astrological beliefs about the stars, including that Mars was of a volatile nature, and simultaneously was able to provide revolutionary astronomical knowledge. Wedepohl identified this as a Warburgian 'liberation' from demonic forces and a precursor to the Enlightenment.[107] Wedepohl astrological analyzed Panel C's 'Children of the Planets' print of Mars ruling April: she noted the presence of Mars between signs Libra and Virgo and attributed Mars's 'houses' to Scorpio and Taurus; no astrological source was given, and these are not the generally accepted astrological significations of Mars.[108] Wedepohl saw this panel as moving toward 'progress,' and found evidence of Warburg's rendering of humanity's dominance through the inclusion of the Zeppelin.[109]

Seminario Mnemosyne, a group of writers organized by Italian art journal *engramma,* have produced articles focused on the *Atlas* mainly from 2015 to 2017, though they published articles as early as 2001. As the Seminario consisted of many writers, various positions were produced during their work. This included two articles that utilized astrological knowledge to interpret Panels 25 (the Temple Malatestiano) and 58 (Dürer's Cosmology). Like Wedepohl in her work, the first article did not utilize

[105] Papapetros, Sequence 4, p.4, Seq. 5, p.5.
[106] Claudia Wedepohl, 'Panel C,' *Mnemosyne: Meanderings through Aby Warburg's Atlas* (2013-2016), Intro, p.1, <https://warburg.library.cornell.edu/panel/c > [accessed 25 September 2021].
[107] Wedepohl, 'Panel C,' Intro, p.1.
[108] Wedepohl, 'Panel C,' Sequence 2, p.1.
[109] Wedepohl, 'Panel C,' Sequence 3, p.1.

generally accepted astrological standards in analysis; the latter article on Panel 58 was more successful in their astrological analysis, and implied that Warburg may have possessed astrological knowledge in the inferred significance of the images' ordering within the panel.[110] In their article focused on Panel C (Fig. 5), they used Warburg's research to identify astrology as a scientific form of knowledge through the projection of 'demonic' power into quantifiable constellations and points of orientation. Despite the technical aspects of astrology, they found humanity was not detached from the cosmos: in fact, it is a further connection of science to the cosmos.[111] They identified the idea of progress in Panel C as evidenced in the inclusion of the Zeppelin, but noted details from Warburg's own personal, negative experiences with war as evidence of his ambivalence towards technological progression.[112] Other Seminario papers used Warburg's personal background to analyze the three opening panels. Silvia de Laude, a member and organizer of the Seminario Mnemosyne, spent a majority of her 2015 paper, which analyzed the origin of Panels A, B and C, focused on Warburg's biography as it contributed to the themes explored in the panels, and asserted that it was Saxl's influence that brought astrology to the forefront of the *Atlas*.[113] Their article focused on Panel A (Fig. 3) focused on the images as representing the various ways humanity is interconnected. This paper found that the image of the constellation represented the evolution of religious ideas from antiquity to the Renaissance which

[110] Seminario Mnemosyne, '*Coincendtia oppositorium*: the Malatesta Temple,' *engramma*, 8 (May 2001), p.4, <http://www.engramma.it/eOS/index.php?id_articolo=2516> , [accessed 26 September 2021]; Seminario Mnemosyne, 'Cosmology in Dürer,' *engramma,* 18 (July/August 2002), pp.3-5, <http://www.engramma.it/eOS/index.php?id_articolo=2505>, [accessed 26 September 2021].
[111] Seminario Mnemosyne, 'The Conquest of the Sky: War and Technique,' *engramma,* 5 (January 2001), pp.28-29.
[112] Seminario Mnemosyne, 'The Conquest of the Sky,' p.30.
[113] de Laude, pp.1-26.

resulted in the 'neutralisation' of the demonic power of the cosmos as the zodiacal constellations became mere metaphors for the effect stars had on earth.[114]

The Seminario also took the approach of analyzing the panels based on the ordering of images and panels in order to derive meaning; they foregrounded their reasoning with Warburg's own research or notes. In Panel A (Fig. 3), they wrote that astrology acted as a 'star' — the constellations placed at the top give light to the world and people below, leading to people giving the stars 'form and sense' and that the linear organization of the images indicated a linear relationship between the stars, earth, and the people that inhabit it.[115] In their 2017 paper focused on Panel B (Fig. 4), the Seminario used the organization of images in three rows to derive three themes from the panel: cosmological, anthropometrical, and magico-apotropaic.[116]They argued that the images in the center of the panel from Renaissance era 'masters' da Vinci and Dürer , who drew geometric forms from the proportions of the human body, and the centered placement of these images and the centrality of Panel B among the introductory panels was Warburg's indication that the human body is the active force from which the cosmos radiates.[117] The Seminario placed Warburg's interest in 'Orientation' within the philosophical context of Kant and drew the comparison of Warburg's interest in the tension between astrology and logic with Warburg's own borrowing from Nietzsche's Apollo and Dionysus theory. The Seminario placed Warburg's interest in 'Orientation' within the philosophical context of Kant and drew the comparison of Warburg's interest

[114] Seminario Mnemosyne, 'Orientation: cosmology, geography, genealogy,' *engramma*, 135 (April/May 2016), p.9, <http://www.engramma.it/eOS/index.php?id_articolo=2831>, [accessed 26 September 2021].
[115] Seminario Mnemosyne, 'Through the Maze: Panels A B and C,' *engramma*, 125 (March 2015), p.3, <http://www.engramma.it/eOS/index.php?id_articolo=2341>, [accessed 26 September 2021].
[116] Seminario Mnemosyne, 'Through the Maze,' p.4.
[117] Seminario Mnemosyne, 'From the Cosmos to Man and back. A reading of Plate B in Aby Warburg's *Mnemosyne Atlas*', *engramma*, 142 (February 2017), p.13, < http://www.engramma.it/eOS/index.php?id_articolo=3080>, [accessed 26 September 2021].

in the tension between astrology and logic with Warburg's own borrowing from Nietzsche's Apollo and Dionysus theory.[118]

Berlin's Haus der Kulturen der Welt held an exhibition of the first 'complete' recreation of the *Atlas* from 4 September to 1 November 2020, curated by Roberto Ohrt and Axel Heil in cooperation with the Warburg Institute. The exhibition was made electronically accessible to the public due to the spread of COVID-19; the publishing of the exhibition's catalogue was of critical importance to my research, as it gave me detailed access to the layout and contents of the reconstructed panels.[119] In the following chapter, I conduct a detailed analysis and discussion of Panels 23a, 34, and 50-51.

[118] Seminario Mnemosyne, 'Through the Maze,' p.6.
[119] Warburg, *Bilderatlas Mnemosyne – The Original*, pp.1-176.

Analysis and Discussion of Panels



Figure 6: Aby Warburg, *Panel 23a*, from *Bilderatlas Mnemosyne,* c. 1929, photographs on panel board, 120x150cm, Warburg Institute, London. *Image*: *engramma*.

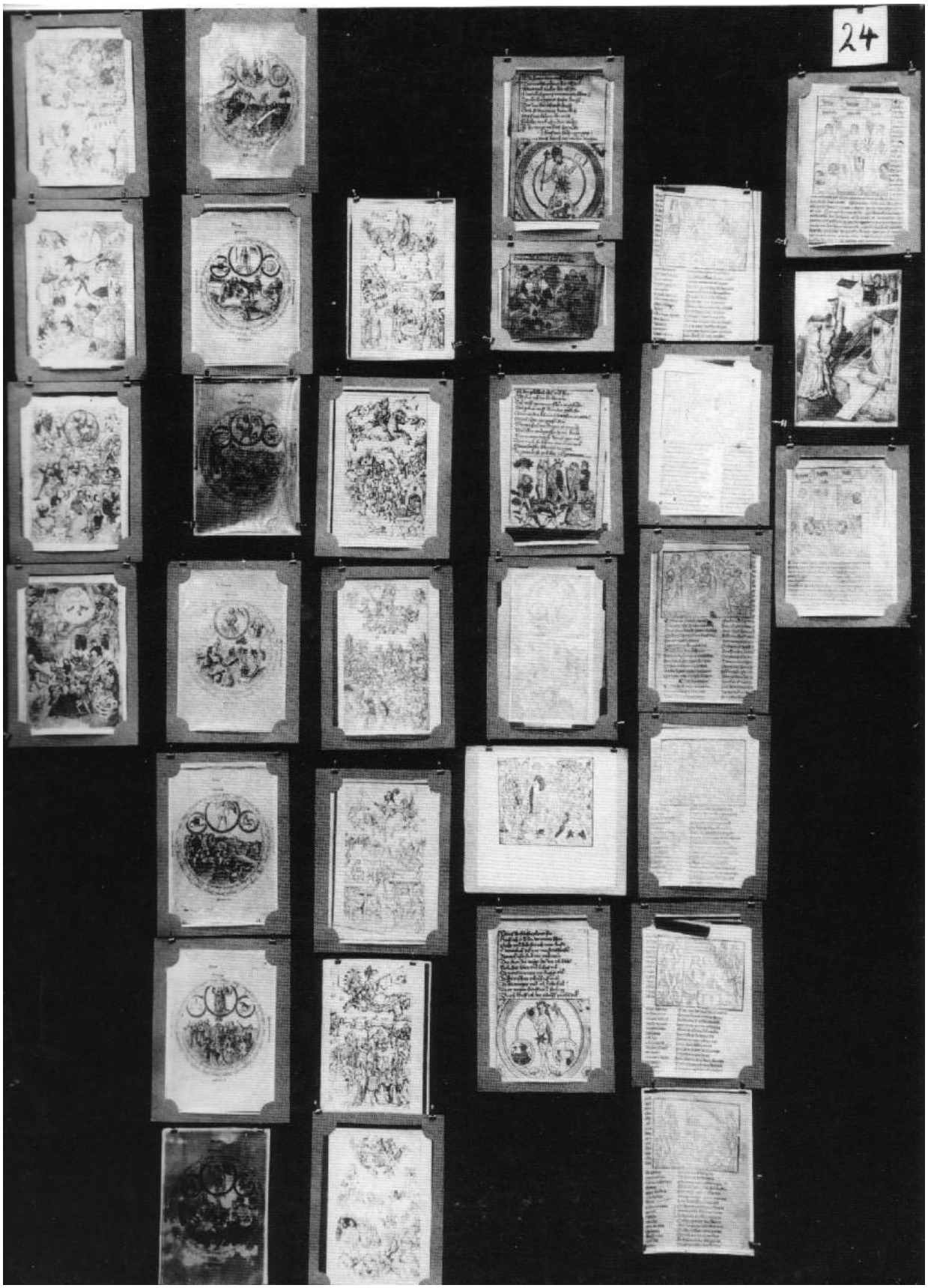


Figure 7: Aby Warburg, *Panel 24*, from *Bilderatlas Mnemosyne*, c. 1929, photographs on panel board, 120x150cm, Warburg Institute, London. *Image: engramma*.

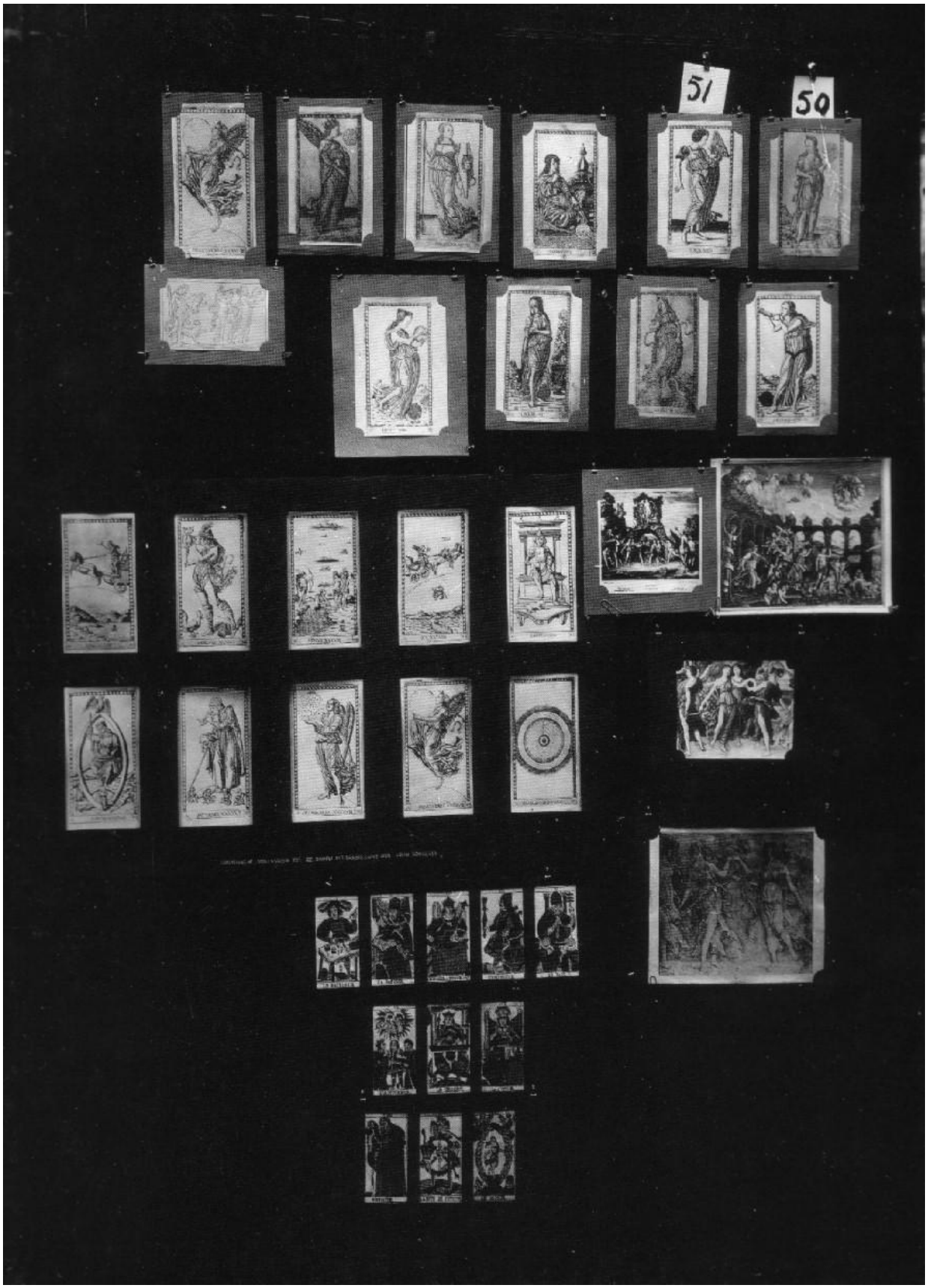


Figure 8: Aby Warburg, *Panel 50-51,* from *Bilderatlas Mnemosyne,* c. 1929, photographs on panel board, 120x150cm, Warburg Institute, London. *Image*: *engramma.*

Panel 23a titled '*Regular body as a micro-universe for determining fate by the throwing of dice. Leafing through a book as reading the universe (book of fortune, Lorenzo Spirito). [Books on geomancy missing] Lorenzo Spirito = link to the North. Conception of Fortuna with her wheel as ineluctable fire'*

On Panel 23a (Fig. 6), the top row images are catalogues of astrological dodecahedrons and amulets. The two leftmost images on the second row are from *Le plaisant Jeu du Dodecahedron de Fortune*; the pages shown give instructions and astrological reasons for casting a dodecahedron as dice to obtain answers about the future from the book. The remaining images are from Lorenzo Spirito's (1485-1496) *Libro delle Sorti*, an Italian book from 1482 which also used astrological principles and objects, like dice, to divine answers from its pages. The panel's thematic link is the use of objects, like dice and fortune-telling books, that are based on astrological principles to divine answers to questions. As noted by art historian Silvia Urbini, Panel 23a display of man's use of 'dice, stones, and amulets' to illuminate 'fate' was indicative of Warburg's interest in the Nietzschean[120] Links to other panels can be inferred from the panel's subtitle: a link to Panel B (Fig. 4), which shows astrological mappings onto human bodies in melothesia and Warburg's fascination with the polarity of the human microcosm-stellar macrocosm; finally, links to Northern artworks influenced by Spirito's *Libro*, which will be explored below.

[120] Silvia Urbini, *Il Libro Delle Sorti di Lorenzo Spirito Gualtieri*, (Modena: Franco Cosimo Panini, 2006), p.49.

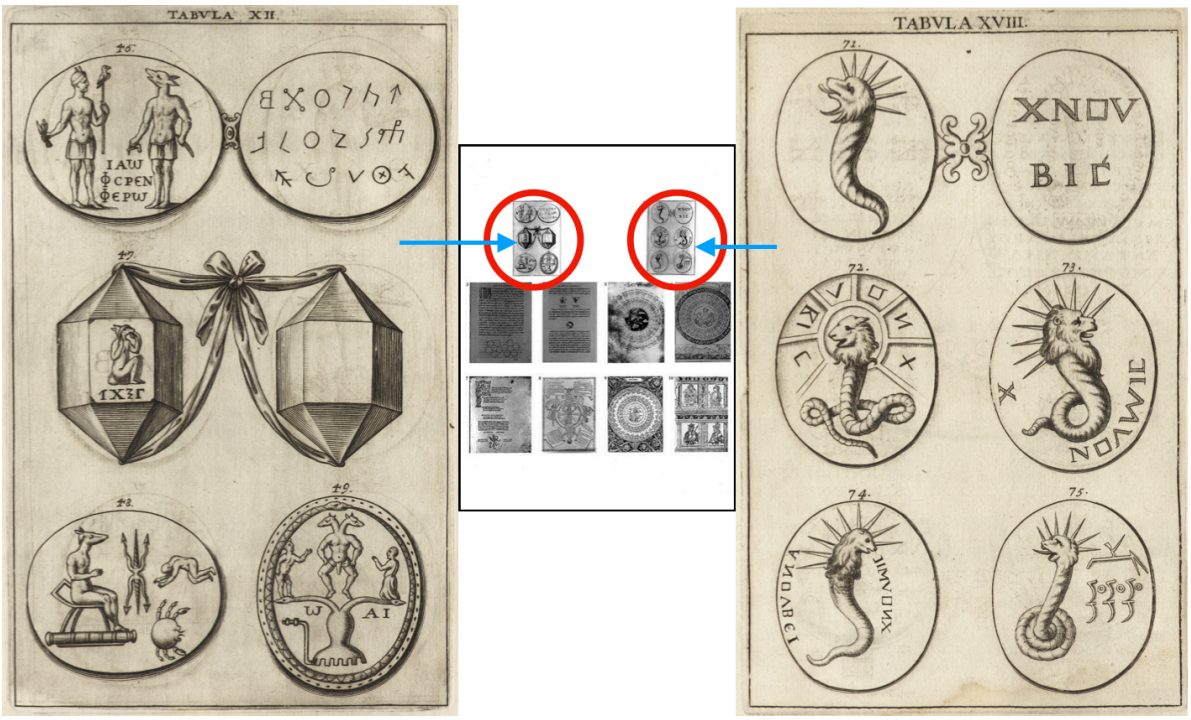


Figure 9: Panel 23a, incorporating (left) *Dice (decahedrons) to cast fate* (left), and (right) *Gnostic solar amulets* (right), from Johannes Chifletius, *Joannes Macarius Canonicus Ariensis Abraxas seu Apistopistus*, c.1657, manuscript illumination, Antwerp. *Image:* Getty Research Institute.

Astrological dodecahedrons and amulets

These images at the top of Panel 23a (Fig. 9) are from the earliest scholarly work on magical gems, undertaken in 1657 by Johannes Macarius and Johannes Chifletius, who, according to gemologists Véronique Dasen and Árpád Nagy, identified them as Gnostic.[121] As noted earlier, Warburg's knowledge came from only his ability to draw conclusions from the images of the dodecahedrons and available texts related to the astrological practices of medieval and Renaissance Europe. It can be surmised that the image of the dodecahedron, placed alongside other astrological 'fortune-telling' images on Panel 23a, was of interest to Warburg due to his research on Martin Luther. Luther took note of the use of astrological dice in Reformation-era Germany: 'If a man throws dice for long enough, he will throw a Venus, but that happens by chance.'[122] Warburg

[121] Véronique Dasen and Árpád Nagy, 'Gems' in *Guide to the Study of Ancient Magic*, ed. by David Frankfurter (Leiden: Brill, 2019), p.444.
[122] Luther, *Luthers Tischreden in der Mathesischen Sammlung*, 124, no. 156 in Warburg, 'Pagan-Antique Prophecy,' p.657.

indicated his own knowledge of this practice in his footnotes, noting that Venus was the luckiest throw as all the multiple die faces displayed different numbers.[123] The Gnostic status of Panel 23a's amulets directed my attention to Panel 8, a collection of images reflecting the Gnostic and Mithraic belief of the 'ascent to the Sun,' including representations of the zodiac. An image of a 300 BCE Helios phalera, which resembles an amulet, is included on Panel 8, depicting the god with rays emerging from his head (Fig. 10), mirroring Panel 23a's amulets with rays emerging from animal heads (Fig. 9). Amulets and medals recur as a *vorgeprägung* in Renaissance art themed panels, such as Panels 30, 34, 39, 41, and 45, which show both mythological figures like Venus, Hercules, and Minerva, as well as prominent Renaissance-era figures in 'divine' or heroic depictions.



Figure 10: Helios (Sol), c.300 BCE, gold-plated silver phalera, 16.2cm (d), British Museum, London. *Image:* British Museum.

[123] Aby Warburg, 'Pagan-Antique Prophecy,' pp.657, 696.



Figure 11: Attr. to Niccolò Fiorentino, *Medal of Giovanna Albizzi Tornabuoni*, c.1485, bronze medal, 7.8cm (d), Staatliche Museen, Münzkabinett, Berlin. *Image:* Alberto Delitala Collection.



Figure 12: King George V as Neptune, c.1913-1916, British postal stamp from Barbados, 4.4x2.8cm, British Library, London. *Image:* British Library.

What Warburg had intended to invoke in this *vorgeprägung* of Gnostic amulets throughout the *Atlas* may be best represented by the amulet on Panel 46, which on one side shows the profile of Giovanna Tornabuoni family, of the influential Medici-Tornabuoni family represented in the family tree on Panel A (Fig. 3), and on its other side depicts the image of 'Venus Virgo' (Fig. 11).[124] The rebirth of antiquity in Renaissance art was fueled by the patronage of wealthy families, like the Medici-

[124] Johnson, *Memory*, p.194.

Tournabuonis, who utilized images of the gods of antiquity to signify powerful attributes about themselves. This reappears in Warburg's era, represented on Panel 77 in the 1916 circular seal of King George V as the god Neptune (Fig.12).[125] This example also shows the difference of intentionality between Warburg's concepts of *vorgeprägung* and *Nachleben*: the choice of powerful figures to align themselves with gods was an intentional *vorgeprägung* to associate them with power and divinity; the *Nachleben der Antike* of their *vorgeprägter* of the Gnostic and Mithraic amulets is unintentional but survives nonetheless through their stylistic similarities. The lateral links formed by the Gnostic amulets and dodecahedrons show the various anachronistic relationships one can find in the *Atlas* and Warburg's concepts, connecting seemingly disparate topics, like wealthy Renaissance trading families to the Mithraic phalera, to astrological fortune-telling, and then to Martin Luther.

[125] Aby Warburg, 'Medician Pageantry at the Valois Court in the Flemish Tapestries of the Galleria degli Uffizi (1927),' in *The Renewal of Pagan Antiquity*, trans. by David Britt, (Los Angeles: Getty Research Institute, 1999), p.348.

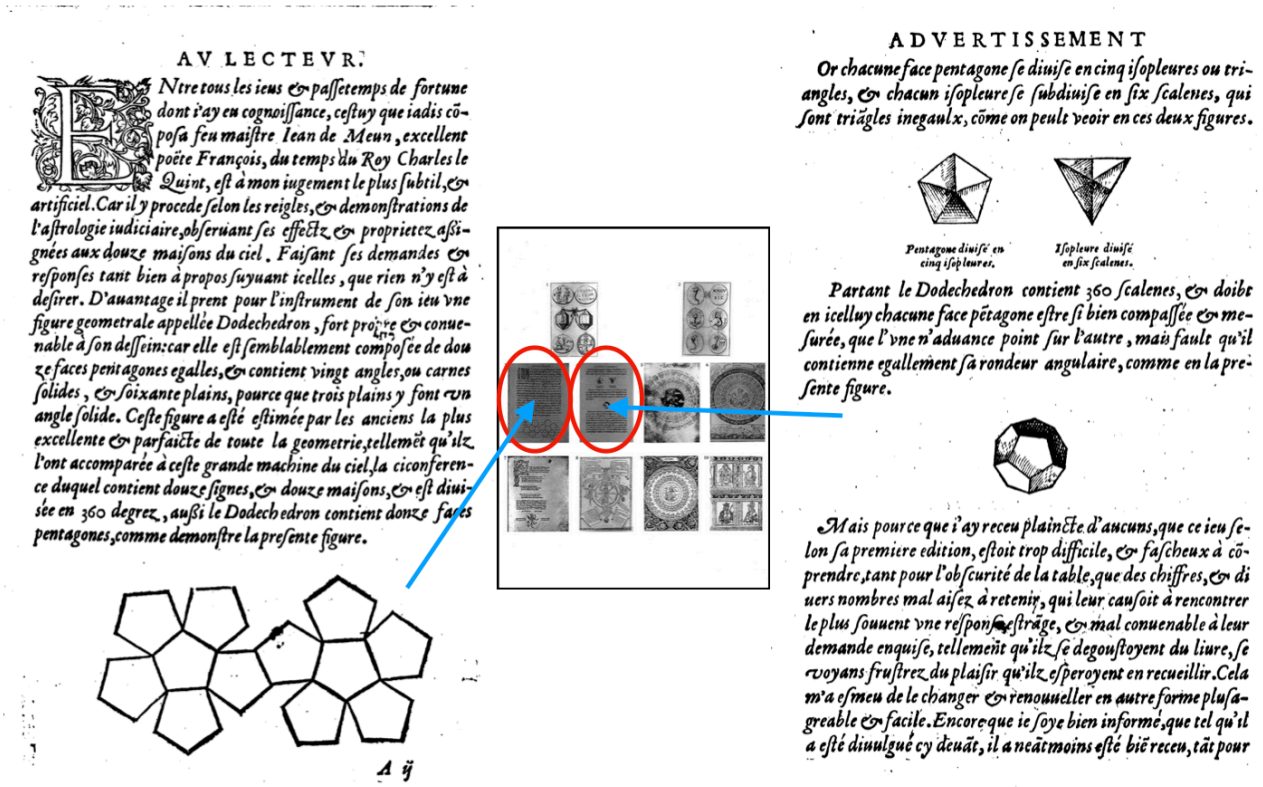


Figure 13: Panel 23a: two images from the middle register depicting an astrological game of dice, incorporating (left, right) *Astrological game of dice* from (attr.) Jean de Meun, *Le plaisant Jeu du Dodecahedron de Fortune, non moins recréatif, que subtil et ingenieux*, c.1560, manuscript illumination, Bavarian State Library, Germany. *Image:* Bavarian State Library, Germany.

Fortune-telling Books

The dodecahedron is shown again on Panel 23a in images from *Le plaisant Jeu du Dodecahedron de Fortune* (Fig. 13), the authorship of which is misattributed to French writer and poet Jean de Meun (1240-1305). The images show an 'unfolded' dodecahedron as well as a three-dimensional model of one. The surrounding text describes the twelve equal pentagonal faces of the 'dice' as the most perfect of all geometry according to the ancients; the twelve equal faces correspond to the twelve zodiacal signs and twelve houses of the 'great machine of the sky.'[126] The resulting numbers shown from the die cast correlate with a zodiac sign, which was used to obtain a page number in the book that would reveal the answer to the question. A similar process was used in Lorenzo Spirito's (1426-1496) *Libro delle Sorti,* but unlike *Le*

[126] *Le plaisant jeu de dodechédrion de fortune, non moins recréatif, que subtil et ingénieux,* digitized 16 June 2009 (Paris: Pour Vincent Sertenas, 1560), pp.'A','y'.

Plaisant, which focused on the geometrical relationship between the dice and twelve zodiac signs/twelve houses model, the *sortes* used, among other figures, the seven planetary deities, the signs of the zodiac, and various constellations to give answers to the querent.[127] Warburg included two versions of the page depicting Saturn on Panel 23a (Fig.14).

Like the amulets, the images from the fortune-telling books link to panels preceding and following Panel 23a. Panel 23a's description claims to depict the body as the microcosm and determine universal fate through dice throwing; Panel B (Fig. 4) explores the same theme in its images of melothesia and Warburg's own description of the panel as 'the application of the cosmic system to mankind.' Similarly, Panel 22, which does not immediately precede 23a, is titled 'the cosmic system as a dice board' (*sic*); this panel contains pages from a thirteenth century Castillian manuscripts depicting astrological figures in the center of a circle and decans, constellations, and moon stations in the ring surrounding it, which visually resemble the 'answers' surrounding *Libro*'s depictions of Saturn (Fig. 14). The *Libro*'s Wheel of Fortune (Fig. 15) is echoed in later panels, including Panel 48, which centers on representations of Fortuna, a Roman goddess connected to ideas of luck and fate, who had a revival of popularity in the Renaissance.[128]

[127] Iafrate, pp.167-172.
[128] Florian Fuchs, 'Panel 48,' *Mnemosyne: Meanderings through Aby Warburg's Atlas* (2013-2016), Introduction, p.1, <https://warburg.library.cornell.edu/panel/48>, [accessed 29 September 2021].

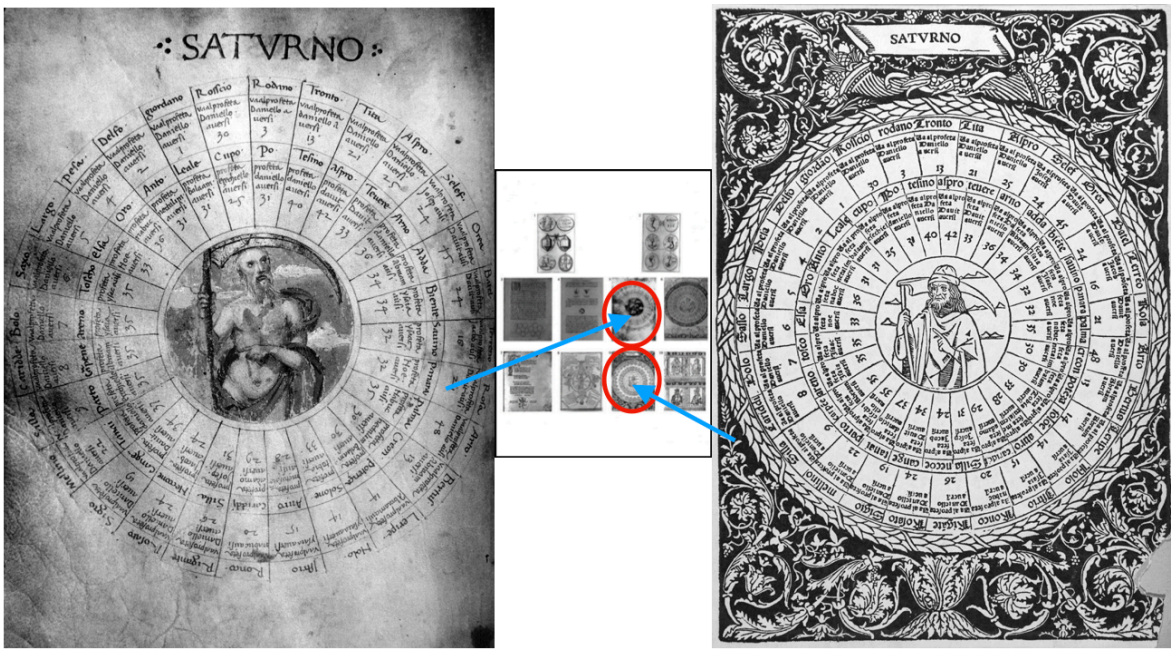


Figure 14: Panel 23a: two images from the middle and lower registers depicting (left) Saturn, c.1482, woodcut, 24.3x17.4 cm, Stadtbibliotek Ulm, Germany, and (right) The workshop of Steffen Arndes, Saturn, c.1487, woodcut, Biblioteca Nazionale Marciana, Venice, both from Lorenzo Spirito, Libro Delle Sorti. *Images*: The Warburg Institute Iconographic Database.

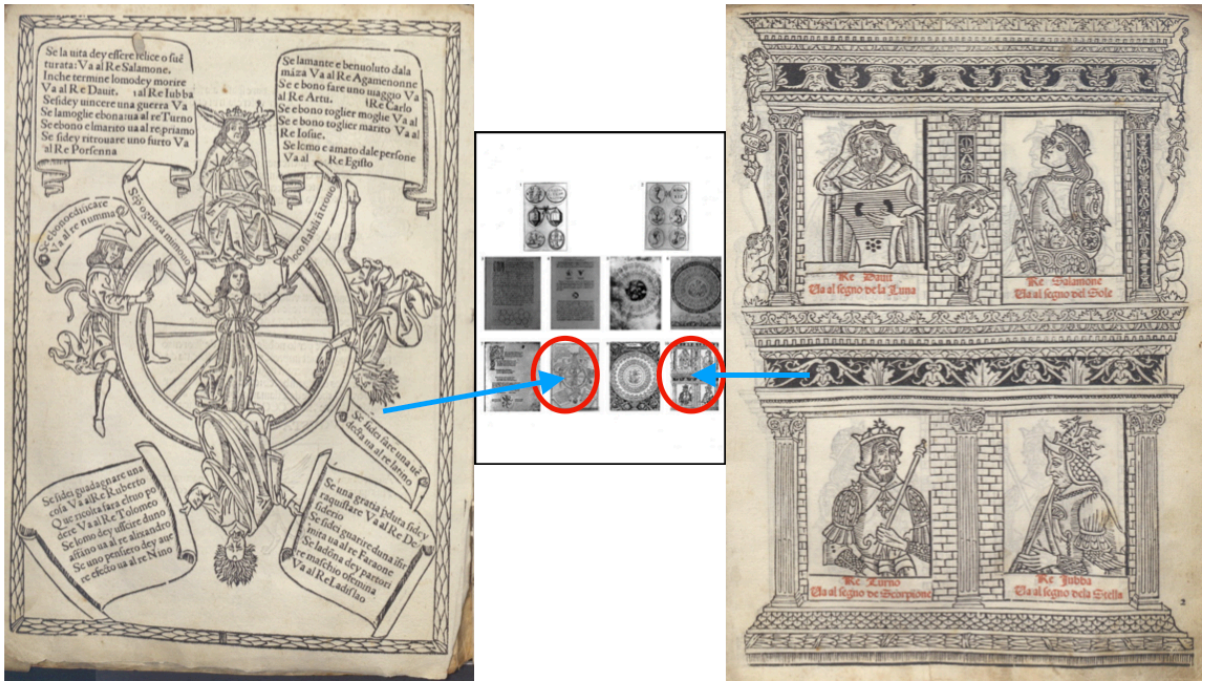


Figure 15: Panel 23a: two images from the lower register depicting (left) *Wheel of Fortune* and (right) *Four Kings from the Old Testament*) from Lorenzo Spirito, *Libro Delle Sorti*, c.1482, woodcut, 24.3x17.4 cm, Stadtbibliotek Ulm, Germany. *Images*: The Warburg Institute Iconographic Database.

Warburg first mentioned Spirito's *Libro Delle Sorti* in his 1908 paper which identified German printmaker Steffen Arndes as part of the team that produced the woodcuts for the book.[129] Warburg observed that the German Arndes' representation of planetary deities was styled after the Italian Mantegna Tarocchi, which is featured prominently on Panel 50-51 (Fig. 8). The work of Arndes is included on Panel 59, entitled 'Migration of the planets to the North' (Fig.16). Not only do Panel 59's images mirror the planetary deities of the Mantegna Tarocchi of Panel 50-51, but they also include shared artistic stylization with the German woodcuts of the 'Children of the Planets,' as Warburg observed in his prior research and were placed on Panel 24 (Fig. 7).[130] As previously mentioned, no clear relationship existed between Panels 23a and 24; their apparent link, given Warburg's research, exists on Panel 59.

[129] Warburg, 'On Images of Planetary Deities,' p.593.
[130] Warburg, 'The Gods of Antiquity,' p.559.



Figure 16: Aby Warburg*, Panel 59,* from *Bilderatlas Mnemosyne,* c. 1929, photographs on panel board, 120x150cm, Warburg Institute, London. *Image: engramma*.

This transmission of images and new, shared artistic styles between German, or 'the North,' and Italy during the Renaissance, represented by the link between Arndes and Spirito, were of key interest to Warburg, as observed by Urbini.[131] She also found that the inclusion of Saturn in his various forms was Warburg showcasing the artistic style developing during the Renaissance that both returned the gods to their statuesque nude forms from antiquity and in contemporary medieval fashions; Warburg's own research into this topic found a mutual influence of this trend between North and South Europe, as Arndes' edition of the *Libro* marked a return to medieval representations of the gods.[132] Though this was one focus of Warburg's art historical research into the Renaissance, an earlier proposed exhibition for the Deutsches Museum in 1927 indicates further relationships between the fortune telling books and the tarot decks featured on Panel 50-51 (Fig. 8).

[131] Urbini, *Il Libro,* pp.48-51.
[132] Warburg, 'The Gods of Antiquity,' p.559.



Figure 17: Aby Warburg, '*Star Prophecy by Lot,'* c.1927, photographs on panel board, Warburg Institute, London. *Image:* Warburg Institute.

Though the exhibition at Deutsches Museum would never come to fruition, Warburg and Saxl mocked up a series of panels meant to show the 'Parable of the Man in the Sky.'[133] A panel (Fig. 17) entitled 'Star Divination by the Lot' included the same pages from *Le Plaisant* and *Libro delle Sorti*, as well as cards from the Tarot of Marseilles, which are featured on Panel 50-51 of the *Atlas* (Fig. 8), and an image from a Spanish fortune telling book titled *Game of Astronomical Tables*, which is featured on Panel 22 of the *Atlas*. Despite the presence of an art historical link from Panel 23a to Panel 50-51, Warburg's lateral connection indicated that Panel 50-51 was meant to link to the earlier panels' themes of astrological games and divination through visual similarity. The figures of the Tarot of Marseilles (Fig. 18) are not explicitly astrological, unlike the planetary deities depicted in Panel 50-51's Mantegna Tarocchi. Warburg believed the Mantegna Tarocchi were used in a similar manner to the astrological divination of the dice, as documented in Chernow's history of the Warburgs and in a 1909 letter to Renaissance scholar Paul Kristeller, which explains the placement of the Tarocchi alongside the fortune-telling books in this panel.[134]

[133] Fleckner, p.191.
[134] Chernow, p.274; Warburg, 'Warburg, Aby to Kristeller, Paul 21/09/1909.'

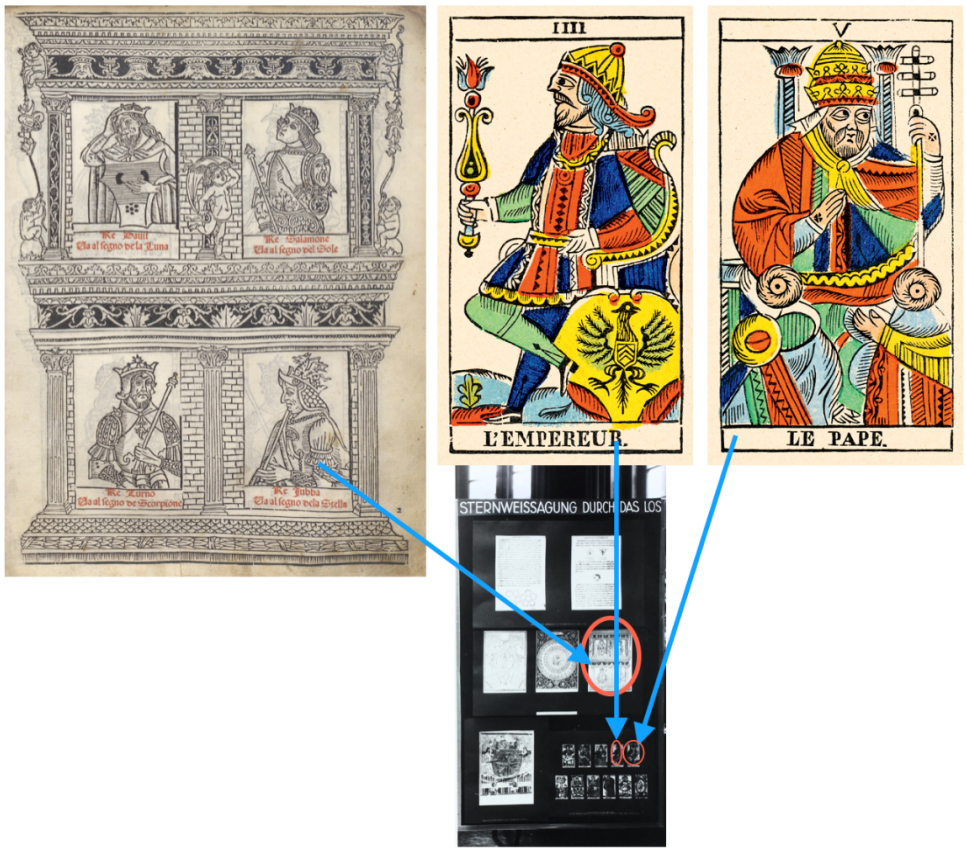


Figure 18: '*Star Prophecy by Lot*': three images from the middle and lower registers depicting (left) enlargements of *Four Kings from the Old Testament* from Lorenzo Spirito, Libro delle Sorti, c.1482, woodcut, 24.3x17.4 cm, Stadtbibliotek Ulm, Germany. *Image*: Stadtbibliotek Ulm, (centre) *L'Empereur*, and (right) *Le Pape*, from Tarot of Marseilles, c.1840-1860, 12x7cm, coloured woodcuts. Image: Tarot of Marseilles Heritage.

The figures of the Tarot of Marseilles, on the other hand, are visually similar and likely were evolutions of the planetary Mantegna Tarocchi, yet they are presented on the proposed panel beneath the image of four kings from *Libro delle Sorti,* likely due to their visual similarity.[135] The figures between the Tarot and *Libro* kings (Fig. 18) have a mirroring effect; similarly, the Wheel of Fortune (Fig. 15) from the *Libro* mirrors the Spanish image of people playing the game of astronomical tables (Fig. 17), which is later displayed in the *Atlas* on Panel 22. Rather than present any grand point, or synthesis, of how or why these images came to mirror each other, Warburg created a

[135] Robert Place, *The Tarot*, (New York: Jeremy P. Tarcher/Penguin, 2005), e-book, p.267.

web of purported thematic and visual similarities that showed the theme of man's relationship to the cosmos and its filtration into society as an invisible undercurrent in ways that had not yet been brought to light. Warburg's myriad of connections and images lacked a succinct, satisfying conclusion, ultimately leading to the Deutsches Museum's rejection of this exhibition.[136]

Panel 23a Analysis Summary

The analysis of Panel 23a first revealed the placement of Gnostic amulets alongside images of 'fortune-telling' books due to his own presumption of their use as astrological dice via his research on Martin Luther, which later scholarship disproved. However, the amulets reproduced the *vorgeprägung* of Gnostic and Mithraic motifs, represented on Panel 8 (Fig. 10), which was later reproduced by the coins and stamps of powerful figures aligning themselves with divinity on Panels 46 (Fig. 11) and 77 (Fig. 12); this section highlighted how astrological images served as an example of Warburg's *vorgeprägung* for later Renaissance and contemporary artefacts. The astrological 'fortune-telling' books similarly made lateral connections to panels sharing in thematic (Panel B, Fig. 4; Panel 22) and visual (Panel 48) similarities. The ability to make these connections based solely on thematic and visual similarities came arose from my discovery of the images of 'fortune-telling' books formerly sharing a panel (Fig. 17) with the Tarocchi and tarot cards of Panel 50-51 (Fig. 8), despite a lack of certain historical facts linking these images. Additionally, Warburg's knowledge of the German printmaker Ardnes' involvement in the production of the Italian *Libro delle Sorti* (Fig. 14) allowed for an exploration of both Warburg's concept of *Nachleben der Antike* in one edition of the book and the Germanic influence of Arndes' edition, demonstrating his concept of the *Wanderstrassen*. The presence of Arndes' work on

[136] Fleckner, p.193.

Panel 23a also allowed for a connection to Panel 59 (Fig. 16), which displayed stylistic mirrorings from both Panel 50-51's Mantegna Tarocchi and Panel 24's (Fig. 7) 'Children of the Planets.'

In attempting to analyze the relationships between the images, the rhizomatic process is brought to life. By following the threads of Panel 23a, Panels 24 and 50-51 resurface without any fanfare or explanation. Any attempt to produce a progressive system of links between the panels becomes decentralized: to start in one part of the *Atlas* is to end up in another without much warning. Warburg had a term for this mélange of interconnected images: *Aalsuppenstil*, or eel-soup style, which del Carmen Molina Barera defined as an associative-rhizomatic, kaleidoscopic way of thinking, in which the eel was chopped into different pieces and stirred around in the broth.[137]

[137] del Carmen Molina Barea, p.5.



Figure 19: Panel 24: three images from the left, center, and right columns depicting (left) *The Planet Jupiter and its Children*, from *Kalendarisches Hausbuch of Master Joseph*, c.1402-1475, illuminated manuscript, 28x21 cm, Universitätsbibliothek, Tübingen, (right) *The Rape of Helen*, fifteenth century, illuminated manuscript, Bayerische Staatsbibliothek, Munich, and (lower right) Master of the Housebook, *The Planet Venus and its Children* from *Medieval Housebook*, c.1470-1482, illuminated manuscript, 25x15 cm, private collection, Germany. *Images:* Warburg Iconographic Database.

Panel 24 titled '*Theory of planetary filiation. (The North?) Theoretical basis for practice'*

Panel 24 (Fig. 7) contains thirty-two images from fifteenth century German and French housebooks and one manuscript illumination of *The Rape of Helen* (Fig. 19). Each row contains images selected from German housebooks, from left to right, as follows: *Calendrical Housebook of Master Joseph*; *Passau Calendar*; Master of the

Housebook's *Medieval Housebook*; *Book of Planets*; and *Chart and Calendar of Shepherds*, which is a French almanac. The images are presented in rows groups and, apart from the manuscript illustration, depict the German iconographic tradition of the 'Children of the Planets.' Art historian Dieter Blume noted that this tradition developed in fifteenth century Germany as a result of astrological texts that popularized the idea of the seven planetary deities having 'children' on earth that correspond to their social roles: scholars and priests were the children of Jupiter, musicians and artists the children of Venus (Fig. 19).[138] Housebooks, as noted by historian Geoffrey Shamos, contained miscellaneous household instructions for tasks such as purifying wine, making soap, and medical treatments, as well as the 'Children of the Planets,' with accompanying poems regarding the planet's influence on their 'offspring.'[139] Scholar Martha Driver noted that the French *Calendar of Shepherds* almanac utilized astrological imagery alongside their calendars.[140]

[138] Dieter Blume, 'Picturing the Stars: Astrological Imagery in the Latin West 1100-1550,' in *A Companion to Astrology in the Renaissance*, ed. by Brendan Dooley (Leiden: Brill, 2014), pp.382-383.
[139] Geoffrey Shamos, 'Astrology as a Social Framework: The 'Children of the Planets', 1400-1600,' *Journal for the Study of Religion, Nature and Culture,* 7.4 (2013), p.442.
[140] Martha Driver, 'When is a Miscellany Not Miscellaneous? Making Sense of the 'Kalendar of Shepherds',' *The Yearbook of English Studies*, 33: Medieval and Early Modern Miscellanies and Anthologies (2003), p.199.



Figure 20: Central Italy (Florence), *Conversion of Paul the Apostle*, c.1460-70, engraving, whereabouts unknown. Image: The Warburg Institute.

Like Panel 23a, Panel 24's direct links are not with the panels directly preceding and following, but in panels far before and after. Panel C (Fig. 5) contains the 'Children of the Planets' depiction of Mars from the *Calendrical Housebook of Master Joseph*. Following Panel 24, the 'Children of the Planets' recurs as a motif in several panels, including the aforementioned Panel 59 (Fig. 16). Panel 39 pairs two versions of Baldini's 'The Planet Venus and its Children' with Botticelli's representations of Venus; Panel 41a includes a fifteenth century Italian graving of the *Conversion of Paul the Apostle* (Fig. 20), whose imagery heavily resembles the 'Children of the Planets,' with a celestial figure communing with a crowd below. Panel 36 represents a link between Panels 24 and 50-51: the panel is comprised of late fifteenth century Italian manuscript illuminations that represent mythological figures and planetary deities on standalone pages, similar to the presentation of the tarot cards of Panel 50-51, in which the planetary deities, like Venus and the Sun, are represented on their chariots, just as

they are represented in the 'Children of the Planets' motifs of Panel 24. The appearance of Italian versions of the 'Children of the Planets,' including its potential influence on the Italian *Conversion of Paul the Apostle*, demonstrates the influence of the German tradition on the images circulating in the *Wanderstrassen*.



Figure 21: Panel 35: two images from the center and right columns depicting (left) enlargements of *Birth of Venus, Cupid, and the Three Graces*, c.1484, coloured woodcut, 30.5x48 cm, Colard Mansion, Bruges. *Image*: Warburg Iconographic Collection, and (right) *The Sun and its Children*, from the so-called *Berlin Planetary Book*, c.1470, coloured woodcut, 28x20 cm, Staatlichen Museen, Berlin. *Image:* Staatliche Museen. *Panel Image*: *engramma*.

Panel 35 serves as a curious example, as Warburg drew a clear connection to Panel 24 in his titling: 'Antiquity in the French Style…Paris (Rape of Helen) …Venus with the Graces (astrological!) …Swap Mars [Panel 35] and Helen [Panel 24].' Warburg's interest in the astrological nature of Panel 35's *Birth of Venus, Cupid and Three Graces* (Fig. 21) was its representation of Venus with the three graces and cupid flying above; this is the same composition of the Venus card of the Mantegna Tarocchi (Fig. 27), which connects Panel 35 to Panel 50-51. The significance of this connection will be addressed in the analysis of Panel 50-51. Panel 35 includes a depiction of *The Sun and its Children* (Fig. 21, right) from the so-called *Berlin Planetary Book*; in a

reversal of Panel 24, this image is the only astrological image alongside fifteenth century French and Dutch manuscript illuminations of various myths, including the *Rape of Helen* and *Judgement of Paris.* The inclusion of *The Sun and its Children* instead of Mars in the recreation of this panel was a choice made by the curators of the catalogue; unable to obtain the original image, they used an image from Warburg's collection with the same motif. It is unclear what image the original panel used, and if the substitution of *The Sun* disrupted Warburg's thematic narrative for the panel.

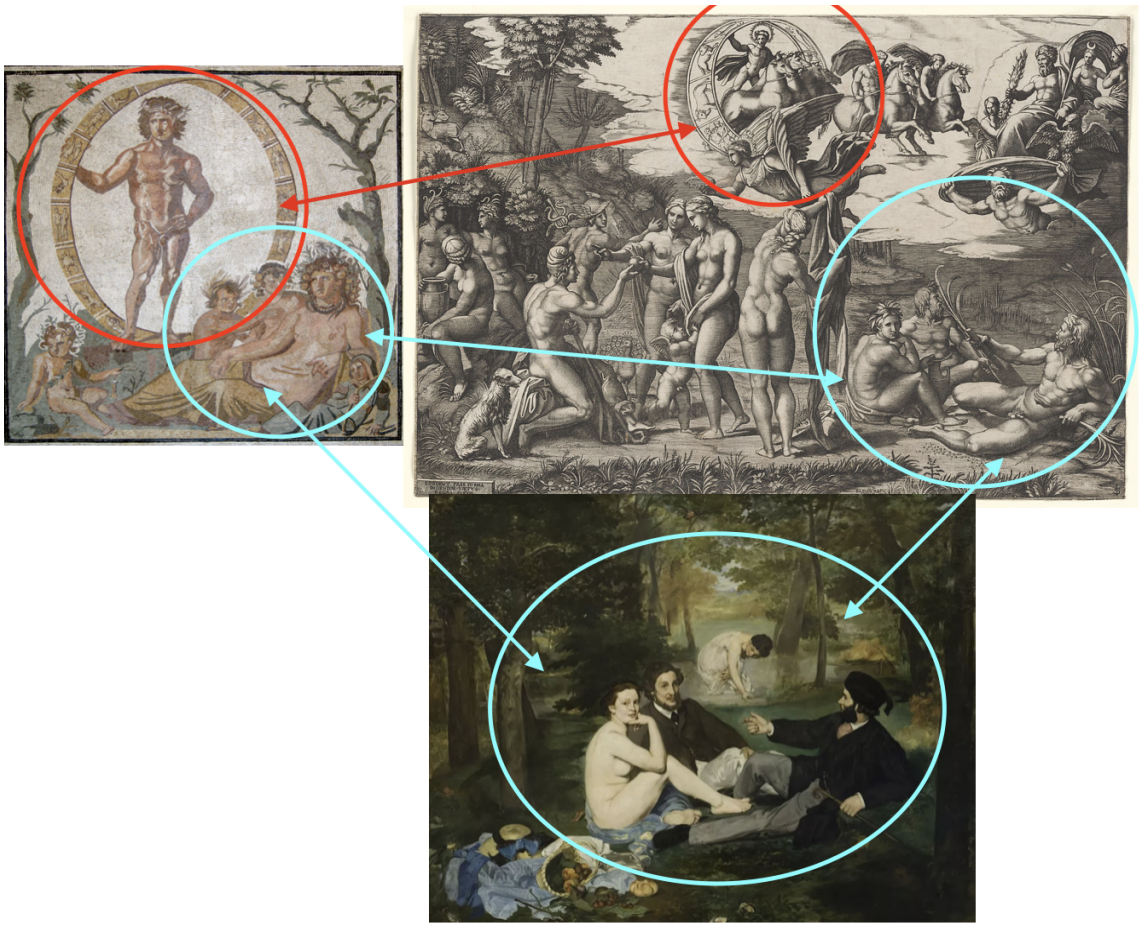


Figure 22: A comparison of (left) *Aion (Sol), Tellus and the Four Seasons*, early third century BCE, Mosaic, Glyptothek, Munich. *Image*: The Warburg Institute, (upper right) Marcantonio Raimondi, *The Judgement of Paris*, c.1510-20, engraving, 28x44 cm, British Museum, London. *Image:* The Warburg Institute, and (lower right) Édouard Manet, *Luncheon on the Grass*, c.1863, oil on canvas, 208x264.5 cm, Musée d'Orsay, Paris. *Image*: Artsy.

The visual similarities between the 'Children of the Planets' series and their contemporary representations of the *Judgement of Paris* and *Rape of Helen*, both

depictions of different parts of the mythology behind the Trojan War, were mostly limited to artistic style. However, later representations of the mythological Judgement of Paris have a shared composition to the 'Children of the Planets,' which may indicate why Warburg decided to originally pair the 'Children' with images of the Trojan myths on Panels 24 (Fig. 19) and 25 (Fig. 21). Marcantonio Raimondi's (1480-1534) *Judgement of Paris* (c.1510-20) (Fig. 22, right) on Panel 55 shows this similarity, with Apollo appearing in a celestial sphere on his chariot above the scene below. Elizabeth Sears' research on Panel 8 noted that Warburg's collaborator, Saxl, ruminated on a relationship between this painting and the Mithraic astrological symbolism in the representation of the zodiac as a mandorla around Raimondi's Apollo. This representation is found on Panel 8 in figures of Mithraic sun-gods encircled by a circular zodiac (Fig. 22, left).[141] Imbert, Bassiri, and Allan found that Warburg saw Raimondi's painting as influential on Édouard Manet's (1832-1883) *Luncheon on the Grass* (c.1863), which is also displayed on Panel 55 (Fig. 21, lower right).[142] This relationship, through its lateral links and earlier representation in Mithraic zodiacal iconography, indicates Warburg and Saxl found Mithraic representations as a *vorgeprägung*, which resurfaces in later expressions of astrological art in the 'Children of the Planets,' as well as in Christian and 'secular' art, like Manet's *Luncheon on the Grass* and Panel 41a's *Conversion of Paul the Apostle*.

Panel 24 Analysis Summary

The analysis of Panel 24 revealed the popularity of the 'Children of the Planets' artistic trend among the German and Italian iterations along the *Wanderstrassen*, demonstrating Warburg's concept of the flow of influences throughout cultural

[141] Elizabeth Sears, 'Panel 8,' *Mnemosyne: Meanderings through Aby Warburg's Atlas* (2013-2016), Sequence 4, Par. 1, <https://warburg.library.cornell.edu/panel/8>, [accessed 20 August 2021].
[142] Imbert, Bassiri, and Allan, pp.35-36.

interactions. Warburg's initial choice to include manuscript illuminations of the Trojan War myth cycle alongside the 'Children of the Planets' allowed for a connection to a later representation of The Judgement of Paris myth, which both mirrored the 'Children of the Planets' and pointed to the potential *vorgeprägung* of the celestial deity encased in an orb as originating in a Mithraic image of a god within the zodiac (Fig. 22). As a result of Warburg's original pairing of the Trojan War myths with 'The Children of the Planets,' a connection was also established between Panel 35's *Birth of Venus, Cupid and three Graces* (Fig. 21) with the Mantegna Tarocchi's representation of Venus (Fig. 27).



Figure 23: Panel 50-51: three images from the second and third registers depicting (left) enlargements of *Maenad and Two Satyrs,* from *Real Museo Borbonico,* c.1824-8, line engraving, Getty Research Institute, Los Angeles. *Image:* Internet Archive*,* (upper right) *Erato* and (lower left) *Mercury,* from the Mantegna Tarocchi*,* c.1465, engraving, 17.9x10 cm, British Museum, London. *Image:* The Warburg Iconographic Database.

Panel 50-51, titled '*Subdivision and making handleable. Muses. Virtues and Vices. Harmonic system. Ascent. Female funerary dancers'*

Panel 50-51 (Fig. 8) displays two sets of tarot cards, the Mantegna Tarocchi and the Tarot of Marseilles, two paintings by Andrea Mantegna, two details of Mantegna's dancing Muses, and a sketch of a Neo-Attic relief of a Maenad and two Satyrs (Fig. 23). As previously noted, Warburg found the Mantegna Tarocchi to be significant, as its models of celestial deities were seemingly coped in later German astrological almanacs and certainly copied by Dürer, whose versions of the Tarocchi are reproduced in the *Atlas* on Panel 57. Panel 50-51 is placed between Panels 49 and 52, which focus on the

expressive and gestural *Pathosformeln* of victory in Mantegna and other Renaissance artists' works, rather than in the schema of astrological panels. Tarot historian Robert Place observed that Renaissance artists' interest in depicting victory is evident in tarot decks of the time as well, as even a game using these cards would be considered an expression of the triumph of truth.[143] The inclusion of the Neo-Attic sketch from 30 BCE-40 CE of the celebratory Maenads next to *Erato* indicates similarities in imagery from antiquity and its *Nachleben* in Renaissance times, suggesting that Warburg may have used this panel to show the roots of the 'victory' *Pathosformeln* in antiquity to its revival in the Renaissance in Mantegna's work and the Tarot of Marseilles.

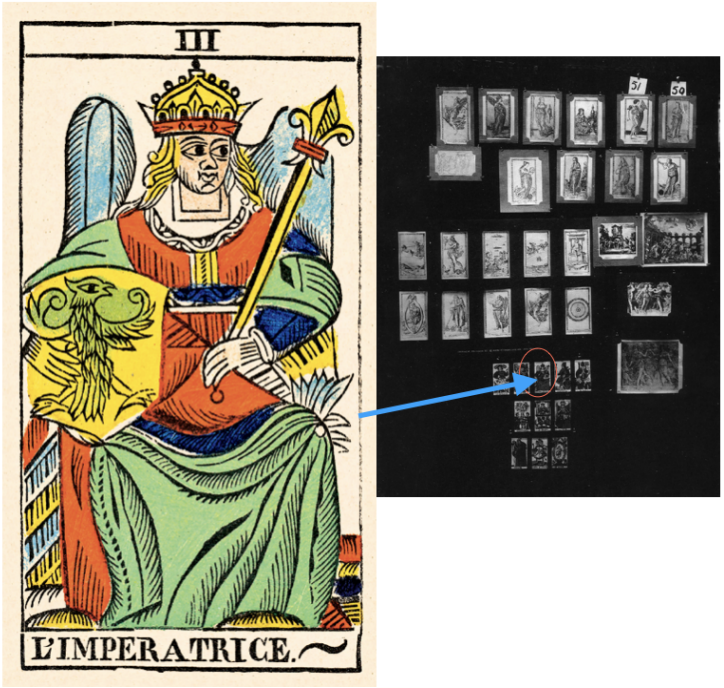


Figure 24: Panel 50-51, with enlargement of *L'Imperatrice*, from the Tarot of Marseilles, c.1840-60, coloured woodcut, 12x7 cm. *Image*: Tarot of Marseilles Heritage.

Tarocchi, Tarot

Twenty cards from the Mantegna Tarocchi are displayed on the panel (Fig. 23); the first group of ten depicts the Muses and Liberal Arts, and the second group depicts

[143] Place, p.36.

planetary deities like Mercury and Saturn, and the celestial spheres. The deck was produced in 1465 as a set of fifty engravings, likely produced in Ferrara.[144] Eleven cards from the Tarot of Marseilles (Fig. 24) are displayed at the bottom of the panel; though they do not contain any clear astrological imagery, these tarot figures strongly mirror the planetary deities of the Mantegna Tarocchi, indicating a survival of astrological imagery in the later tarot cards. First produced in 1507 in Marseilles, this deck became the conventional form for European decks throughout the sixteenth century, as Marseilles was a port city that allowed the deck to spread in popularity across the continent.[145]

Place suggested that there may be an Italian model for the French iconography in the Tarot of Marseilles but argued that most of the cards leaving Italy at that time were of a four-suit deck meant for gambling.[146] Warburg's visual comparison, on the other hand, suggested a direct iconographic link via the influence of the Mantegna Tarocchi's planetary deities on the Tarot of Marseilles. The clearest example, cited by Place, is the transformation of the deity Mars (Fig. 25) into the Chariot (Fig. 26).[147] Further visual similarities can be drawn: Venus (Fig. 27) and the Lovers (Fig. 28) depicting multiple figures interacting accompanied by Cupid; Jupiter (Fig. 29) and the World (Fig. 30), both encased within oval-shapes and tended to by anthropomorphic figures and animals; Saturn (Fig. 31) and the Hermit (Fig. 32), in stature and characteristics.

[144] Eva Skopalová, 'The Mantegna Tarocchi and the View of the World in Northern Italy in the 15th Century,' *Umení*, 62.6 (Jan. 2014), p.502; Kristen Lippincott, 'Mantegna's Tarocchi,' *Print Quarterly,* 3.4 (December 1986), p. 357.
[145] Place, p.21.
[146] Place, pp.33, 53-54.
[147] Place, p.267.

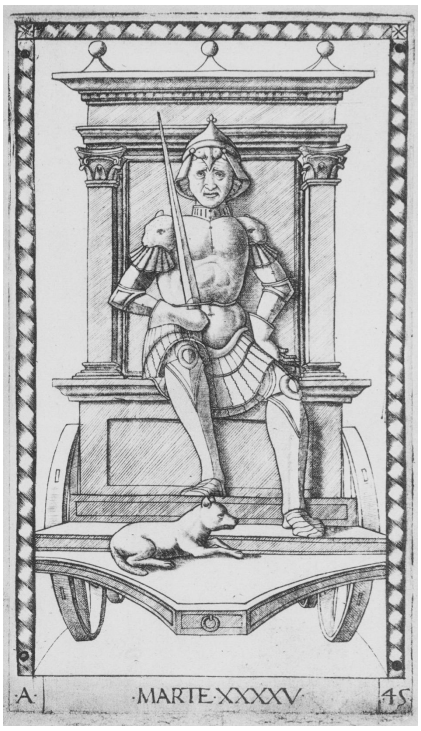


Figure 25: Mars, from the Mantegna Tarocchi, c.1465, engraving, 17.9x10 cm, British Museum, London. *Image*: Warburg Iconographic Database.

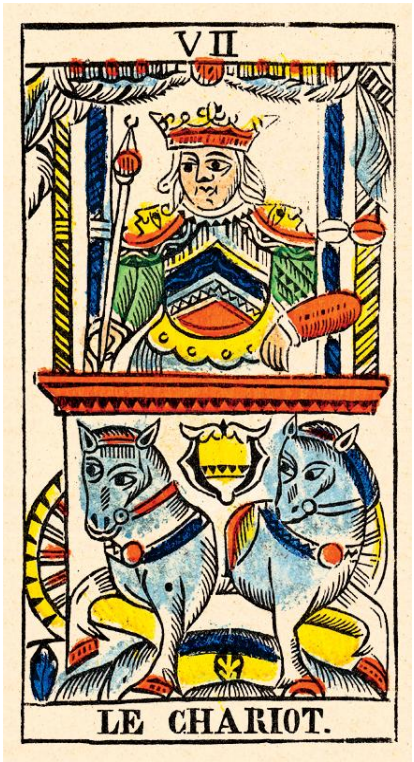


Figure 26: Le Chariot, from the Tarot of Marseilles, c.1840-60, coloured woodcut, 12x7 cm. *Image*: Tarot of Marseilles Heritage.

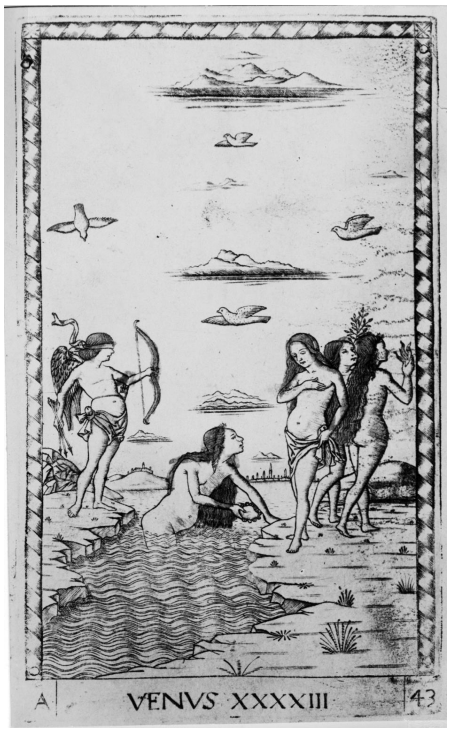


Figure 27: Venus, from the Mantegna Tarocchi, c.1465, engraving, 17.9x10 cm, British Museum, London. *Image*: Warburg Iconographic Database.



Figure 28: L'Amoureux, from the Tarot of Marseilles, c.1840-60, coloured woodcut, 12x7 cm. *Image*: Tarot of Marseilles Heritage.



Figure 29: Jupiter, from the Mantegna Tarocchi, c.1465, engraving, 17.9x10 cm, British Museum, London. *Image*: Warburg Iconographic Database.



Figure 30: Le Monde, from the Tarot of Marseilles, c.1840-60, coloured woodcut, 12x7 cm. *Image*: Tarot of Marseilles Heritage.



Figure 31: Saturn, from the Mantegna Tarocchi, c.1465, engraving, 17.9x10 cm, British Museum, London. *Image*: Warburg Iconographic Database.

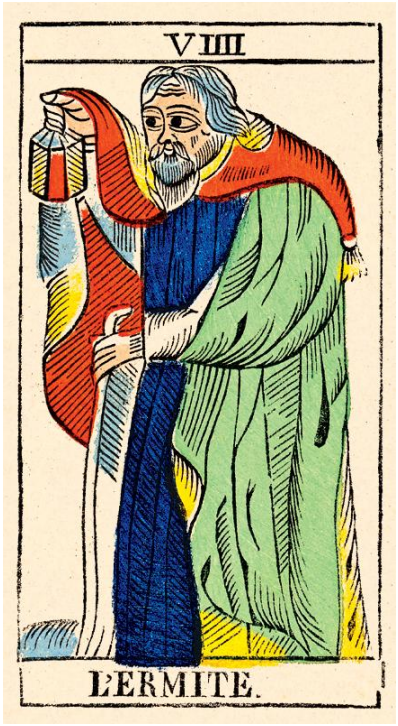


Figure 32: L'Ermite, from the Tarot of Marseilles, c.1840-60, coloured woodcut, 12x7cm. *Image*: Tarot of Marseilles Heritage.

As previously mentioned, the *Birth of Venus* from Panel 35 (Fig. 21) connects to the Mantegna Tarocchi's Venus (Fig. 27), as both utilize a depiction of Venus, the three graces, and Cupid and have a shared composition. Warburg found in his research on the planetary deities depicted in the murals of the Palazzo Schifanoia were based on *De Deorum Imaginubus Libellis,* a fifteenth century text attributed to a monk named Albericus, described as a 'digest account of the gods' which described the Classical appearance of the gods as understood by fourteenth century scholarship.[148] This shared influence between the Tarocchi and the Palazzo Schifanoia is emphasized by evidence that the first European tarot decks were created in the early fifteenth century in Northern Italy, in either Milan, Ferrara (the location of the Palazzo Schifanoia), or Bologna.[149]Warburg cited *De Deorum*'s description of Venus as emerging from water, surrounded by the Graces and Cupid 'winged and blind,' as evidence of Venus's medieval depiction in the Palazzo Schifanoia.[150] She is also depicted in *De Deorum*'s medieval description in the Mantegna Tarocchi and in Panel 35's *Birth of Venus* (Fig. 21). Warburg included images from the Palazzo Schifanoia murals on Panel 27, therefore creating a link between Panels 50-51, 35, and 27. Warburg identified the Mantegna Tarocchi as emblematic of a period of transition in Renaissance art. He found that Venus was represented in *De Deorum*'s 'medieval way,' whereas Mercury had taken on the 'lineaments of antique sculpture,' which is underscored by Warburg's placement of the Neo-Attic dancers next to Mercury (Fig. 22), marking a point in Renaissance art that had not fully abandoned medieval styles, and was yet dipping further into the *Nachleben der Antike*[151]

[148] Warburg, 'Italian Art and International Astrology,' pp.564, 577, 732-733.
[149] Place, pp.35-37.
[150] Warburg, 'Italian Art and International Astrology,' p.577.
[151] Warburg, 'The Gods of Antiquity,' p.559.

Warburg's comparisons and interrelations, as drawn by his visual juxtaposition of the images, pointed both to his evidence that the images of the Mantegna Tarocchi's celestial deities were a part of 'the circulation of forms that defined the artistic interaction between North and South in that age of migrant images,' as well as to rhizomatic observations of Warburg's *Atlas* as dealing with time and the procession of images in a non-linear manner.[152] The Venus of *De Deorum*'s medieval description is evoked in the Mantegna Tarocchi, which then influenced the French Tarot of Marseilles depiction of Lovers, which returned to the Middle Ages model of representing figures in contemporary dress, despite the contemporaneous trend of the return to antiquity, as represented in Mercury's Tarocchi depiction. This indicates that astrological materials were one of the clearest vehicles Warburg had for the interconnecting influence of the *Wanderstrassen*, and another example of a *vorgeprägung,* an idea of an earlier 'stamp' that returns, yet is changed by time.

Panel 50-51 Analysis Summary

The analysis of Panel 50-51 revealed further connections of the Mantegna Tarocchi than what had been previously established in the analysis of Panels 23a and 24. Links were formed with Dürer's copies of the Mantegna Tarocchi on Panel 57 and with Panel 27's images of the Palazzo Schifanoia's murals, which shared in a medieval depiction of Venus that appeared in the Mantegna Tarocchi (Fig. 27) and in Panel 35's *The Birth of Venus* (Fig. 21). Warburg's positioning of this panel within his exploration of the *Pathosformeln* of victory and his inclusion of a sketch of dancers from antiquity indicate that this panel expresses further social artefacts that share in the gestures of 'victory,' as expressed in the Mantegna Tarocchi. Mercury's representation in the

[152] Warburg, 'The Gods of Antiquity,' p.560; del Carmen Molina Barea, p.1; Didi-Huberman, p.23.

Tarocchi, featured alongside the sketch from antiquity (Fig. 23), demonstrates Warburg's concept of the *Nachleben der Antike*. As discussed, Warburg found the Mantegna Tarocchi to be a transitional point in Renaissance art, utilizing both medieval and Antique depictions of the planetary gods (Figs. 23, 27), which then became models for *vorgeprägung* of the Tarot of Marseilles. This indicates not only did the Mantegna Tarocchi embody a multitude of Warburg's concepts, but also had great influence within the *Wanderstrassen* for their later re-imagination in the Tarot of Marseilles (Figs. 25-32).

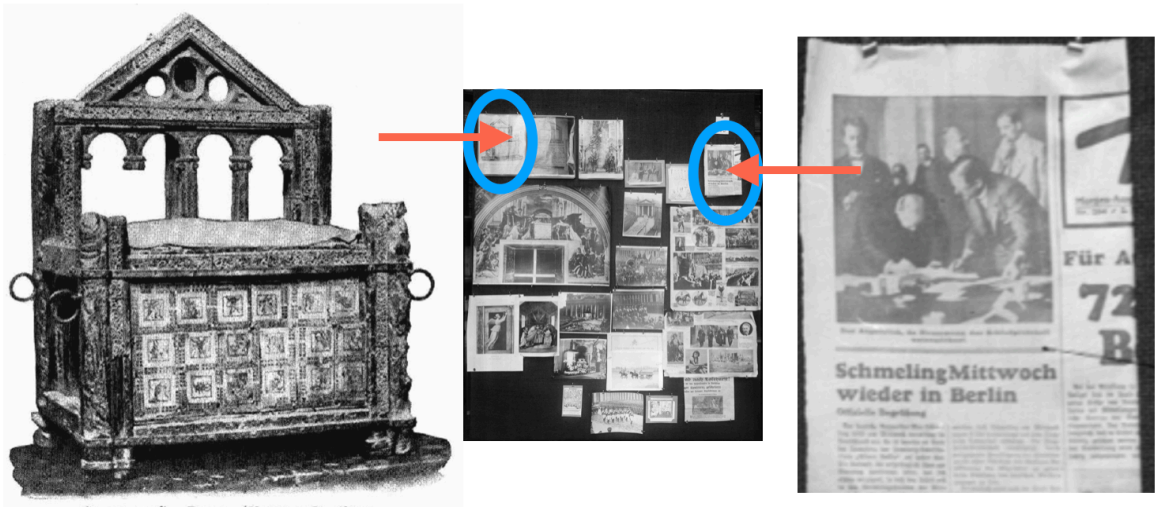


Figure 33: Panel 79: two images from the left and right columns depicting (left) enlargements of *Chair of St. Peter*, c. 875, wood and ebony relief, Basilica di San Pietro in Vaticano, Vatican City. *Image:* Taylor Marshall, and (right) detail of cover page of the morning edition of *Tempo 1929*, no. 204 dated 9.3.1929, newspaper clipping. *Image: engramma. Panel Image: engramma.*

The Role of the Astrological Image, as Revealed via Panel Analysis

This panel analysis revealed the capability of astrological images to demonstrate Warburg's art historical concepts; this was possible due to the rhizomatic lens, which allowed for connections to be made between seemingly disparate and anachronistic, non-progressive panels. The abundance of rhizomatic connections made between the panels verified the observation that the *Atlas* utilizes a rhizomatic schema. The connections were made due to thematic and visual similarity, rather than historical accuracy, due to the discovery of Warburg's earlier iteration of the *Atlas* which displayed his thought process (Fig. 17). In order to verify the specific role of astrological images within the *Atlas*, I reviewed my research on the *Atlas* and found that non-astrological images also embody Warburg's art historical concepts, such as those explored in *engramma's* survey of the *Pathosformeln* of melancholy and 'annihilation' among Panels 4, 5, 41, 48, and 58.[153] This indicates that a close analysis of specific panels was able to identify one role of astrological images within the *Atlas*, that of

[153] Seminario Mnemosyne, 'Figures of Melancholy through the Atlas of Memory,' *engramma,* 140 (Dec. 2016), <http://www.engramma.it/eOS/index.php?id_articolo=3039>, [accessed 28 December 2021]; Giulia Bordignon, 'Re-emergence of the pathos of annihilation,' *engramma*, 157 (July/August 2018), <http://www.engramma.it/eOS/index.php?id_articolo=3460>, [accessed 28 December 2021].

demonstrating Warburg's art historical concepts, but leaves the matter of the specific role of the astrological image unresolved. Due to the presence of astrological images in both the opening panels (Figs. 3-5) and in the final panel (Panel 79, Fig. 33), I sought to determine if astrological images had greater significance than their shared role. To ascertain their specific role, I will bring together my research on Warburg's writings and the *Atlas* within the following concluding section.

Conclusion

The aim of this dissertation was to analyze the role of astrological images in German art historian Aby Warburg's (1866-1929) *Bilderatlas Mnemosyne* (Picture-Atlas of Memory) (c.1926-1929.) I used text and image-based research methods. The primary source was the 2020 catalogue of the Atlas, Warburg's personal letters, and Warburg's scholarly writings, such as those collected in the Getty Research Institute's 1999 *The Renewal of Pagan Antiquity*. I also utilized approaches from art history and critical theory, both of which I trained at an undergraduate level at New York University's Gallatin School, along with astrological knowledge from a practitioner's perspective. Due to my training in critical theory, I also incorporated Deleuze and Guattari's theory of the rhizome, which they defined as 'an acentered, nonhierarchical, nonsignifying…without an organizing memory or central automaton, defined solely by a circulation of states,' to analyze the connections between the panels' images.[154] In discovering this connection, I found precedent for applying Deleuze and Guattari's theory through other scholars' research, such as the work of Chriolla, Mosquera, Didi-Huberman, and del Carmen Molina Barea, who observed that Warburg's work evoked the theory of the rhizome. My research departed from our shared observation due to my choice of utilizing a close analysis of three panels to verify this claim.

The Atlas exemplified Warburg's aims in creating a 'new' art history, which applied anthropology, sociology, philosophy, and psychology to the study of all artifacts, not just fine art. Warburg developed various terms in his scholarly writings, which were utilized in his 'new' art historical analyses and throughout this dissertation. *Denkraum* refers to a liminal mental space for thought and reflection. *Wanderstrassen* is a term that encompasses both the physical trans-European trade routes on which images

[154] Deleuze and Guattari, p.21.

were exchanged over time and the transformations of artistic style due to these exchanges. *Pathosformeln* is the concept of emotive gestures displayed by a human figure's body and was Warburg's initial focus in analyzing Renaissance art. *Nachleben*, closely translated as 'survival,' is a term Warburg adopted in his research of the survival of the artistic references to antiquity (*Nachleben der Antike*) in Renaissance art. *Vorgeprägter* and *vorprägung*, meaning 'pre-stamped' and 'pre-stamping,' are terms Warburg developed to explain the origins, often from antiquity, of the repetition of motifs throughout art history.

The section 'Warburg and Astrology' detailed Warburg's relationship with astrology throughout his scholarly career. Warburg had unfortunate dealings with an astrologer called Roxroy from 1910-1912. Prior to this exchange, Warburg's research into astrological images identified astrology as a 'consistent iconographic tradition,' evidence of both *Nachleben der Antike* and *Wanderstrassen*, and an aid to early humanity's 'existential helplessness in the cosmos.'[155] After 1912, his academic writing referred to astrology as 'dangerous' and 'fallacious,' yet continued to use astrological images to exemplify his art historical concepts.[156] Warburg's approach to astrology was influenced by both his research into the medieval-era *Picatrix*, which combined astrology with magic, and his interpretation of Nietzsche's Apollonian-Dionysian polarity as logic versus the demonic-intoxicating. This resulted in Warburg's understanding of astrology as a polarity of early astronomical logic and magical-demonic submission. He utilized astrological imagery for his art historical and psychological understandings of ancient, medieval, and Renaissance society, but disavowed its contemporary practice in Germany as a symptom of pre-WWI anxiety.

[155] Chernow, p.274; Warburg, 'The Gods of Antiquity,' p.559-560
[156] Warburg, 'Italian Art and International Astrology,' pp.563,566.

Having reviewed the previous literature in the field which directly cited astrological images in the Atlas, I found that many analyses fixated on idea of the Atlas as a narrative of 'progress' and identified the role of astrological images as demonstrative of early, illogical thought in contrast to later scientific progress, mainly due to the themes presented in Panels A-C (Figs. 3-5). Given the large number of astrological images throughout the *Atlas*, I determined to conduct a detailed analysis and discussion of Panels 23a, 24, and 50-51.

In analyzing the selected panels, I found that the images were best understood in the context of their lateral connections to images on other panels, as the only available writing on the images was Warburg's own research. These lateral connections were identified through the application of my analysis of Warburg's earlier iteration of the *Atlas* (Fig. 17), which revealed that Warburg's linking of images was, at times, based solely on a visual or loose thematic similarity, allowing for lateral connections to form between panels. By identifying these connections through visual similarity and Warburg's research, I found that Warburg continued to exemplify his concepts for a new art history in astrological images through a web of connections with different panels.

The analysis of Panel 23a revealed the *vorgeprägung* present in the Gnostic amulets, which allowed for connections to the Mithraic phalera on Panel 8 and the *Nachleben* in the coins and stamps of the powerful on later panels (Figs. 9-12). The analysis of Panel 23a also revealed *Nachleben der Antike* in Saturn's representation as a god of antiquity in the Italian Libro delle Sorti (Fig. 14), as well as the mutual German-Italian influence of the *Wanderstrassen* on the work, as the illustrations of one edition

were by German printmaker Steffen Arndes, whose work is included the later Panel 59 (Fig. 16) in the *Atlas*.

Panel 24's analysis identified the motif of the German 'Children of the Planets' (Fig. 18) planetary deity, encased in a celestial circle, as a *vorgeprägung* of the celestial deities in orbs in later Christian art, such as Conversion of Paul the Apostle (Fig. 19). Warburg's inclusion of a manuscript illumination of the mythic origins of the Trojan War on Panel 24 allowed for a connection to Saxl's research on Raimondi's *The Judgement of Paris*, which pointed to a potential origin of the *vorgeprägung* of the planetary deity's celestial circle within a piece of Mithraic art on Panel 8, which was reproduced within the work of Raimondi and Manet on Panel 55 (Fig. 22). Warburg's inclusion of the same Trojan War illumination also connected Panel 24 with Panel 35, which included more illustrations of the myth, as well as a medieval representation of the Birth of Venus that is mirrored in the Mantegna Tarocchi representation of Venus on Panel 50-51 (Figs. 21, 27).

The analysis of Panel 50-51 showed the influence of the Mantegna Tarocchi on German art via the *Wanderstrassen* in a connection to Dürer's reproductions of the cards on Panel 57, as well as the *Nachleben der Antike* in the Mantegna Tarocchi's representation of celestial deities, as well as in the *Pathosformeln* shared between in the ancient funerary dancers and the Tarocchi's Muses. The Mantegna Tarocchi's deities were reproduced as a *vorgeprägter* in the secular cards of the Tarot of Marseilles (Figs. 27-31). As indicative of the rhizomatic style of Warburg's Atlas, it was revealed that all three panels share connections, either directly with each other or by way of non-chronological panels, creating a lateral network of repetition over time, instead of a chronological hierarchy of progress.

However, non-astrological images exemplify some of Warburg's art historical concepts and identify a web of lateral connections, such as those explored in *engramma*'s survey of *Pathosformeln*.[157] My examination revealed that a close analysis of specific panels did not clarify the specific role of astrological images in the *Atlas*. I surmised that the astrological images had further significance due to Warburg's own dismissal of astrology and the persistence of astrological images throughout the *Atlas*, despite the ability of non-astrological images to exemplify his concepts. In reviewing Warburg's writings, I found that Warburg had difficulty expanding his art historical ideas in his early career, as he only originally focused on the dynamic *Pathosformeln* of Renaissance art. Warburg wrote that he lacked a 'gauge' in which 'internal human processes' apparent in the gestures could be assessed. He found his gauge in his 1895 observations of the Hopi people, in which art was 'an instrument of magical-primitive culture,' and theorized that all pre-historic societies produced aesthetic events in a spiritual manner.[158] For the Renaissance, Warburg located this pre-historic society in antiquity, and that their spiritual-aesthetic event was represented in art that was 'an orientation instrument for the heavens.'[159]

Art that doubles as an orientation instrument is exemplified in the *Atlas*'s astrological images through the physical orientation of Panel A's map of constellations (Fig. 3), the calendrical orientation of Panel 24 (Fig. 18) and Panel 59's (Fig. 16) astrological almanacs, the spiritual orientation towards celestial deities in Panel 8's Mithraic representations of the zodiac in the 'ascent to the Sun,' and as observed by Gombrich, Panel 1's images of the Babylonian zodiac.[160] Warburg's captions for Panels

[157] Seminario Mnemosyne, 'Figures of Melancholy;' Bordignon, 'Re-emergence of the pathos.'
[158] Warburg, 'Arsenal,' pp.115-116.
[159] Warburg, 'Arsenal,' p.118.
[160] Gombrich, *Aby Warburg*, p.292.

B and 23a referred to the application of the cosmos's 'fate' to humanity and the body: Panel 23a and 50-51's fortune-telling books and cards (Figs.14, 22, 23), Panel 24's 'Children of the Planets' signifying professions and behaviors related to zodiacal signs (Fig.18), and Panel B's images of melothesia (Fig.4) indicating zodiacal directives in medicine, are examples of man attempting to find orientation within the fate of the cosmos. Warburg's introduction of antiquity into the *Atlas* on Panels 1 to 3 focused on ancient astrological images; as previously discussed, Warburg's understanding of astrology was 'magical' and initially an aid to 'helpless,' or primitive, man.

Given this evidence, it can be stated that unlike non-astrological images, astrological images exemplify the spiritual-aesthetic event of the Atlas, which Warburg initially sought as a gauge to assess internal human processes. Therefore, the role of astrological images in the Atlas is twofold. The first role, as discovered in my panel analysis, is to exemplify Warburg's art historical concepts; this is a shared role among all the images in the Atlas, which Warburg utilized to demonstrate his 'new' art history. The second role, which is specific to astrological images, is that of Warburg's gauge of internal human processes due to their association with the spiritual-aesthetic event.

This gauge meant to indicate where art had its root in the 'experience of paganism in nature,' which for European art, Warburg found in astrological images.[161] However, astrology's continued presence in art and culture over time, as observed by its many images in the *Atlas*, indicated to Warburg that the Apollo-Dionysus polarity of logical thought versus demonic superstition was constantly present. He summarized this observation in writing that 'Athens,' signifying logic, 'wants again and again to be

[161] Warburg, 'Arsenal,' p.115.

reconquered afresh from Alexandria,' signifying superstition.[162] Unlike the arguments cited in the literature review, which found Panels A to C (Figs.3-5) to represent a narrative of progress, from 'illogical' uses of astrological melothesia to 'logical' uses of astronomy, I argue that Warburg intended the opening panels to reflect this polarity as a continuum that is at play throughout the *Atlas*, in which astrological images are utilized as a gauge. As previously noted, Warburg found astrology's popularity in pre-World War I Germany to be a symptom of anxiety, indicating that Warburg did not view his contemporary society as 'logical.' This is further evidenced by the Atlas's final panel, Panel 79, subtitled 'Mass. Devouring God. Bolsena. Paganism in the Church. Miracle of the host. Transsubstantiation. Italian Criminal before the Last Rites,' in which an image of the *Chair of Saint Peter* (c. 875), a chair located in the Vatican and adorned with zodiacal glyphs, is presented alongside an image of the signing of the Treaty of Locarno, which signified the end of World War I (Fig. 33). Warburg juxtaposed these images to indicate that European society is in a constant state of flux between illogical superstitions and logical advancements, and that World War I evoked the superstitious side of the polarity, which he indicated by using an astrological image in Panel 79. Astrological images, alongside envisioning Warburg's concepts, also demarcated where society was in the polarity's continuum, allowing Warburg a multi-disciplinary understanding of society over time, which was crucial to his new art historical aims.

Despite Warburg's own dismissal of the practice, his utilization of astrological images for his gauge over time highlights astrology's specific characteristics that allowed for this application. As shown within the *Atlas*, astrology was utilized in, and not limited to, spirituality, medicine (Panel B, Fig. 4), fortune-telling (Panel 23a, Fig.14), artistry (Panel 50-51, Fig. 8), ideas of political power (Fig. 11, 12), and the

[162] Warburg, 'Pagan-Antique Prophecy,' p.650.

keeping of time (Panel 24, Fig. 18). Though Warburg associated astrology as the initial aesthetic-event of a 'primitive' society, astrology's persistent and diverse applications over time resulted in a wealth of images that led to Warburg's realization of the aesthetic event as man's ability to orient himself within the cosmos. Astrology's varied integrations, such as in medicine (Fig. 4) and in Christian churches (Fig.33), proved to be an apt gauge for Warburg, as it allowed him to analyze the logical-superstitious polarity in different aspects of society, allowing for a thorough 'mirror for historical life.'[163] Astrology's multivalent attachments also provide evidence of Warburg's polarity as a continuum, rather than a narrative towards logical progress, as astrology was able to survive over time through its evolutionary relationships with other disciplines, instead of 'die out' with the advent of astronomical science, as is suggested by other scholars' readings of Panels A-C (Figs.3-5).

As previously noted, Deleuze and Guattari wrote that the rhizome is 'a map...entirely oriented toward an experimentation in contact with the real...the map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification.'[164] This description mirrors the creation of the *Atlas*: mobile panel boards, on which related and unrelated images could be rearranged, and meant to be experienced 'in contact with the real' in its public exhibition. It also mirrors what has become evident about astrology: unlike other artefacts, which can speak to the crosscurrents of Warburg's interest in sociology, artistry, and psychology only in the time they were created, astrology's ability to both stick to many different disciplines and evolve over time resulted in a multitude of heterogeneous astrological images that act as Warburg's gauge in the unfurling of the *Atlas*'s landscape.

[163] Warburg, 'Arsenal,' p.118.
[164] Deleuze and Guattari, p.21.

In summation, this dissertation analyzed Panels 23a, 24, and 50-51 to ascertain the role of astrological images in Aby Warburg's *Bilderatlas Mnemosyne*. In utilizing a rhizomatic lens, connections were drawn between images on the selected panels and images on non-sequential panels that demonstrated Warburg's art historical concepts, which he had conceived in his 'new' multidisciplinary approach to art history. Though the panel analysis verified the rhizomatic schema as observed by myself and other scholars, this close analysis did not reveal the specific role of astrological images, as non-astrological images also shared in the ability to demonstrate Warburg's concepts. By integrating my knowledge of the *Atlas* at large, as well as Warburg's writings, I was able to determine that Warburg found astrological images to be indicative of 'primitive' Western society's initial spiritual-aesthetic event, which he identified as man's separation from and orientation within the cosmos. Warburg utilized this event, and therefore astrological images, as a gauge in which he could analyze the degree of spiritual-'superstition' versus scientific logic present in society's beliefs throughout history. Therefore, the role of astrological images was found to be twofold: both able to envision Warburg's art historical concepts, as any artifact could, and to specifically act as a socio-psychological gauge for Warburg's analysis. As Warburg noted, it was the integration of the cosmological and pictorial that allowed for his creation of a new, 'cultural-scientific art history.'[165] The astrological images were able to bring Warburg to this conclusion due to their persistence through time. This is due to astrology's ability to be applied to and evolve within many disciplines, allowing Warburg a reference point for society's relationship with the spiritual-'superstitious,' rather than as simply representing an artefact of a primitive time.

[165] Warburg, 'Arsenal,' p.118.

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