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**Things that Matter: The Case of an Astrolabe in Filippino Lippi's  
*Adoration of the Magi* in the Uffizi in Florence\***

Much has been written about the role of architecture in painting and, to some extent, on the significance of representing sculpture in painting. However, the function of artefacts in painting has not been thoroughly explored. It seems as if the general term applied to artefacts of different materials, namely minor arts or applied arts, hints at the relatively underestimated status, in which this category of works of art is classified.

A turning point in the scholarly approach towards minor arts, at least in the field of medieval European art, was made by Hanns Swarzenski in 1953, in his influential book *Monuments of Romanesque Art*. This specific title clearly demonstrates Swarzenski's aspiration to present to the readers the so-called minor arts in this book in a magnified perspective. Moreover, the following passage quoted from his introduction to this book illustrates his criticism concerning the undervalued state of the minor arts:

It is one of those amusing, ironical incidents in the story of human ambitions that this age, whose craving for archaeological correctness had made it so history-conscious, entirely lost sight of the true meaning of these so-called minor arts of the early Middle Ages. For they represent the great arts of their period and should have to be classified as such, if the distinction between 'major' and 'minor' arts had existed at all at the time when they were made (Swarzenski 1953: 12).

The present article is a small contribution to the large and still unexplored field of research, which involves the significance of minor arts within the study of history of art. It aims at looking at the importance, or more accurately the role, of objects in painting, namely the iconography of objects.

It is beyond the scope of this article to discuss in detail the different facets

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\* This article was read in a symposium dedicated to Professor Rudolf Kuhn and organised by the Institute for German Studies of the University of Tel Aviv and the Institute of Jewish History of the University of Munich. The symposium was held in Tel Aviv University on January 2001.

of the iconography of objects, or better say *objectology*, but it is, perhaps, worth mentioning some of the objects' general and major roles in painting.

Apart from their usual and obvious role, in which they are involved in specific activities, either indoors or outdoors, it must be stressed that artefacts have the ability to function as commemorative objects (*aide-mémoire*). The best examples are relics and reliquaries which are clearly associated with a specific holy person or event, or, for example, souvenirs which are meant to remind us of someone and, or, of a specific incident or a place. At any case, relics, reliquaries and souvenirs do act as mementoes. Artefacts, however, could also function as topographical or historical references in the specific painting in which they are depicted. Thus, to some extent, their impact might be compared to that which spoils usually have when integrated in architecture. The position that artefacts take within the whole composition is sometimes no less important than that of figures. They may also contribute to the outward form and appearance in painting, namely to the so-called 'formalist' matters of the visual arts.

In this study I would like to focus on the depiction of the astrolabe in the *Adoration of the Magi* of the Florentine artist Filippino Lippi (see pls. I and II).<sup>1</sup>

Filippino Lippi was born in Prato around 1457. Like many other Florentine artists of his era, he decided to follow his father's profession, the famous renaissance artist Fra Filippo Lippi, and some documents even testify that he was first trained in his father's workshop. Later, in 1472, he joined Sandro Botticelli's bottega, and it is likely that his earliest style was formed there. As an independent artist, he was mainly occupied with projects in Florence, among which was the prestigious commission to complete Masaccio's frescoes in the Brancacci chapel in Santa Maria del Carmine; this was done between 1484-1485.<sup>2</sup> In August 1488 he left Florence, arrived in Rome, and started to decorate the Carafa chapel in the church of Santa Maria sopra Minerva (Geiger 1981: 62-75 and 1986; see also Röttgen 1997: II, 202-29). This challenging project, which lasts almost five years, was probably one of his major artistic achievements. Back in Florence in 1493, he was occupied with some other monumental paintings, for example the Strozzi chapel in Santa Maria Novella (completed in 1502; Peters-Schildgen 1989; see also Röttgen 1997: II, 229-53). He had several other important contracts, among which the *Adoration of the Magi* commissioned by the monks of the cloister of San Donato a Scopeto near Florence and completed in 1496, is the case in point in this article. Filippino Lippi died in Florence in 1504.

<sup>1</sup> For general literature on Filippino Lippi see mainly: Neilson (1938); Scharf (1950); Berti - Baldini (1957 and the revised edition of 1991); Howe Shoemaker (1975). See also Carl (1987: 373-91).

<sup>2</sup> See mainly, Molho (1977: 50-98); Ladis (1993); Röttgen (1997: I, 92-119); Kuhn (2000: 581-618, with extensive literature, especially p. 581, n. 189).





Filippino Lippi, *Adoration of the Magi*, Florence 1496.  
Firenze, Galleria degli Uffizi.



Detail of pl. I. A figure (Pier Francesco [de' Medici] il Vecchio?) with an astrolabe.



*Joseph and Potiphar's Wife*, Vienna Genesis.  
Vienna, National Library, Cod. Theol. Gr. 13, fol. 16v. (After Levin 1972: 243, fig. 2).





*The Hour of Birth, Maqāmāt of al-Harīrī, Baghdad 1237*  
(painted by Yahyā ibn Maḥmūd al-Wasīṭī).

Paris, Bibliothèque nationale de France, MS. Arabe 5847 (Schefer Hariri), fol. 122v.

The *Adoration of the Magi* is kept at present in the Uffizi Museum in Florence. The inscription which appears on the rear side of the panel tells us that Filippino Lippi completed it on the 29th of March, 1496:

FILIPPINUS ME PINSIT DE LIPPI FLORENTINUS ADD XXIX DI MARZO  
MCCCCLXXXVI.

In fact, according to documents, it is known that the monks of the cloister of San Donato a Scopeto ordered an altarpiece on this specific theme in 1481. The artist chosen for it was Leonardo. However, for some reasons, which cannot be sufficiently detected, Leonardo did not complete this altarpiece, and it has been usually suggested that the unfinished *Adoration of the Magi* of Leonardo, which is also kept in the Uffizi, might be the specific one designed for San Donato a Scopeto. Moreover, numerous scholars pointed out to the similar composition of Leonardo's *Adoration of the Magi* and that of Filippino Lippi and even suggest that Filippino Lippi most probably saw Leonardo's unfinished piece. However, this speculation cannot be easily attested and will probably remain, as it has been so far, controversial (Below 1971: 49-50; see also Natali 1994: 147-56).

The striking and apparently novel innovation in Filippino Lippi's *Adoration of the Magi* is the almost clear-cut compositional division between excitement and serenity.<sup>3</sup> It seems as if the mass of people who have not yet seen the Infant Christ are whole excited while those who already face the Holy Family mutely adore them with astonishment and compassion.

But let us look first at that which takes place in the 'realm of excitement'. At the left-hand side of the picture, a group of riders are depicted. They speak loudly with each other and are most probably thrilled to discover the star of Bethlehem, which appears above them, high in the sky. Excitement could also be detected along the caravan route. It is likely that riders chat with each other or perhaps even argue, as it also appears in the group of riders on the right hand side of the picture. Nevertheless, as they near the Holy Family, approaching them from behind, it seems as if the tumult and the stimulating atmosphere is taken over by an apparent calm environment. Some excitement, however, can be sensed. This is made clear by the vivid and alert body of the person kneeling on the lower wall behind Joseph and, above all, by the expressive hands' gestures of the figure in profile, who seems to ask or to tell someone something. A person in the dark garment, who stands next to him, tries to calm him down. He talks to him, now wordless, with an exceptionally gentle gesture, pointing with his left hand towards the Holy Family – as if saying: 'there they are'.

If one accepts the suggested division between excitement and serenity in

<sup>3</sup> For the importance of this painting for the mannerism, see Peters-Schildgen (1989: 52-57).

this picture, Joseph and the person standing at the very right hand side of the picture act as border or linking figures between the two realms. Joseph stands on the low ruined wall, just behind Mary, with slightly bending shoulders, forming with his own body a niche-like shape, as if protecting her and the Child from the noisy crowd at the back. The other person standing at the very left hand-side of the picture acts, at least at the first glance, also as a barrier. Using his firm and solid body, he hinders the crowd to move freely to the zone in front of the Infant Christ. But, judging by his inviting eyes and stretched right hand, it seems as if he invites only the calm viewer to move into the realm of serenity.

The situation at the left side of the picture is quite different. A silence mixed with astonishment dominates the whole sphere. Apart from one person who is occupied taking off the crown from the head of one of the Magi, all the others silently look, or rather mediate, at the Infant Christ. The old King kneels in front of Christ and looks at him with a piercing stare. The other King, depicted at the left side of Mary, kneels before Christ and stares at him with compassion and empathy. His empathy is further stressed by his body posture, which imitates, most probably unconsciously, the body posture of the Infant Christ. The third King is almost hypnotised by the Infant. He stretches his left hand towards the royal present, handed to him by one of his companions, while, at the same time, without even being aware of, his crown is taken off his head.

The old man who kneels at the very left side of the picture watches Christ carefully. The wrinkles on his forehead, just above the eyebrows, emphasise his concentration and scrutinised gaze. This particular quality of the sharp-eyed person to notice and observe that which he sees is further enhanced by the accurate astronomical tool he holds in his right arm. This is an astrolabe. A planispherical astronomical instrument in the form of a circular disc which serves for the measuring of altitudes, the calculation of the hour of the day and night, and also casting of horoscopes.

In Europe, in the 15th century, this type of astronomical instrument was known as 'astrolabum catholicum', but, in fact, the European astrolabe was a reproduction of the medieval Islamic one. Scientific studies on astronomy as well as instructions concerning the producing of astrolabes became known to the Arabs mainly through Ptolemy's astronomical book *Syntaxis mathematike* (ca. mid 2nd century AD), which was translated into Arabic and was known in the Arab world as *Almagest*.

The most important source about astrolabes, upon which European scholars such as Gerbert d'Aurillac (end of the 10th century), Pope Sylvester II (ca. 930-1003) and Hermann the Lame of Reichenau (1013-1054) drew, were the works of Māša'allāh (d. circa 815), a Jewish astrologer at the court of the caliph al-Manṣūr and that of 'Abd al-Raḥmān al-Sūfi (d. 986; see Hartner 1986), both of which were based on Ptolemy's *Almagest*.



It seems plausible that the majority of astronomical knowledge diffused into West Europe *via* the Iberian Peninsula. But it is beyond the province of this study to discuss in details the diffusion of science in the Middle Ages from the Muslim world into Europe.

We know, for example, that in 980 Gerbert d'Aurillac travelled to Spain in order to collect material on astronomy and mathematics. One of the earliest translations of scientific books from the Arabic into Latin commissioned by Gerbert was the *Liber de astrologia*; the book was translated by Lupitus of Barcelona in 984. Another manual book concerning the use of astrolabe is also known as having been commissioned by Gerbert (al-Samman – Mazal 1988: 273). Other books on astronomy like the one of Adelard of Bath, or the *De compositione astrolabii* of Hermannus Contractus and the *De sphaera* of Franco of Lüttich appeared in the 11th and the 12th centuries. They were also based on books edited and compiled by Arab writers from Muslim Spain. But, perhaps, the famous and popular book on astronomy in the West was the *Libros del saber de astronomia* commissioned by King Alfonso X of Castile (d. 1284). The book was in fact a compilation of Arabic works on astronomy translated into Latin and Castilian (*ibid.*: 274). It is worth mentioning that a 10th century manuscript from the cloister of Santa Maria de Repoll which includes astronomical texts like *De mensura astrolabii*, *De utilitatibus astrolabii* and compositions of Māša'allāh and 'Abd al-Raḥmān al-Sūfī, is kept at present in the archive de la Corona de Aragón in Barcelona (Cod. Ripoll 225; see *ibid.*: 262, 273). At any case, after 1230, astronomy was taught in the main universities of the Latin West (*ibid.*: 274), and books on astronomy and astrology were quite popular in Europe in the 15th century.

The appearance of an astrolabe in Filippino Lippi's *Adoration of the Magi* is rather curious. It must be admitted that Islamic objects occasionally appear in this iconographic scene, especially in the European paintings of the 15th and 16th centuries (Shalem 1996: 134-37 and 2002; see also Fontana 1995: 296-319; Contadini 1999: 1-60). These are mainly Islamic luxury objects made of ivory and precious metals, which usually serve as containers for holding the presents of the Magi.

It is likely that the Islamic vessels depicted in this Christian theme probably cast an exotic and oriental flavour over the whole scene and enhance the oriental appearance of the Kings of the East. But the astrolabe depicted by Filippino Lippi does not seem to be conceived as a further present of the Kings. Moreover, judging from the way by which it is tightly held – rather than presented –, it is likely that it should be understood as the personal belonging of the old man.

It has been suggested that this old person might be Pier Francesco de' Medici, known as Francesco il Vecchio (d. 1467), and that even his two sons, Lorenzo and Giovanni, might also be depicted in this picture (Below 1971: 52-53). But the identification is not clear. Whoever this figure is, the astrolabe he

holds appears as his private belonging and probably indicates the figure's interest or knowledge in astronomy and astrology.

The appearance, then, of an astrologer or astronomer in this specific scene is genuine; to the best of my knowledge this is the sole example of a figure holding an astrolabe in the scene of the *Adoration of the Magi*. One may speculate that this new iconographic motif is somehow associated with the narrative. For, according to the Biblical account (Matthew 2:1-12), a rising star appeared in the sky as the sign for the birth of Christ. Moreover, it is further related that Herod, who was eager to discover the meaning of the appearance of the star and the possible relation between this cosmic event and the birth of the Child in Bethlehem, asked the advice of some learned men on this issues and even sent them to Bethlehem:

Then Herod summoned the wise men to see him privately. He asked them the exact date on which the star had appeared, and sent them to Bethlehem. Go and find out all about the child, he said...

As mentioned above, astrolabes were used in the Middle Ages for different purposes. In the first place they were used as astronomical devices, by which one can exactly calculate sun or moon eclipses and the re-appearance of celestial bodies and comets in the sky. If one takes the Biblical source at its face value, the wise men were asked by Herod to do something similar, namely to check the exact day for the appearance of a comet. But astrolabes were also in frequent use during childbirth, the aim of which was to find out more about the future of the newly born child. It should be stressed that in the Middle Ages the border between astronomy and astrology was less well-defined than today; books on astronomy usually include information on astrology and even give answers to specific questions concerning the day of birth and horoscope (al-Samman – Mazal 1988: 296-300). Astrolabes were therefore used for telling the future of the newly born child and, sometimes, even of a city. This horoscope forecasting was chiefly involved with the so-called 'big conjunctions' of Saturn and Jupiter as related to the specific hour of the childbirth.

To the best of my knowledge, the earliest depiction of an astrologer in a childbirth scene is to be found in one of the illustrations of the Vienna Genesis (datable to the early 6th century AD), which is kept in Vienna, in the National Library (Cod. Theol. gr.13, fol. 16v).<sup>4</sup> It is the scene of Joseph and Potiphar's wife (see pl. III). The scene is divided into two registers. On the upper zone, on the left side, the seduction scene is depicted. Potiphar's wife holds the garment of Joseph, who tries to escape the palace. Next to this scene, three figures and a baby in a cradle are depicted. It has been suggested that one of them, namely the tall figure wearing a dark long garment and spinning wool

<sup>4</sup> On the Vienna Genesis see Wickhoff (1895); Gerstinger (1931); Buberl (1937).

by hand, is an astrologer and that this scene is based on rabbinic literature on Joseph (Levin 1972: 242-43).<sup>5</sup> According to a Jewish *midrash* (*Midrash Genesis Rabbah* 85:2), it is said that:

rabbi Johusua the son of rabbi Levi said: She (Potiphar's wife) saw by her astrological arts that she was to produce a child by him (Joseph), but she did not know whether it was to be from her or from her daughter.

It should be stressed that this figure has a crown, to which a crescent and a star in its centre are attached; his garment is decorated with small golden dots, which might be interpreted as stars; and the depiction of him spinning wool probably refers to the pagan iconography of the personification of Fate, who at the birth of man spins out the thread of his future life.

An excellent example for the use of an astrolabe during a childbirth is also to be found in an Islamic miniature (see pl. IV). It is one of the illustrations of the *Maqāmāt* of al-Ḥarīrī, which was probably produced in Baghdad in 1237 (Paris, Bibliothèque nationale de France, MS Arabe 5847 [Schefer Hariri], fol. 122v). The story attached to this miniature (*maqāma* no. 39) tells us how al-Ḥarīrī (namely the author) and Abū Zayd, on their journey from Ṣuḥār to Oman, were accepted in a large palace of a prominent ruler, whose wife was in labour. The woman had difficulties during the childbirth, and Abū Zayd advised a pain remedy, for he possessed a spell for childbirth. At the same time, al-Ḥarīrī consulted his astrolabe on three matters: issues concerning the soon-to-be born child, the best moment for the midwife to deliver the baby, and the prediction of the child's future.

The illustration displays to the viewer the interior of a two-storey house. In the ground floor, in the main big room the wife is depicted being supported by her two midwives. Two young servants appear in the small side rooms. On the first floor, in the main room, the worried husband is depicted. He sits on a huge elegant throne, behind of which the heads of two attendants are seen. To his right, in a small domed room, Abū Zayd is depicted while writing his spell on a scroll. On the other side, in the other small domed room, al-Ḥarīrī is seen holding an astrolabe in his right hand.<sup>6</sup>

In sum, the depiction of an astrolabe in the *Adoration of the Magi* of Filippino Lippi casts a new light over the traditional iconography of the subject. This probably involves popular ideas on the use of an astrolabe in childbirth. In the case of the birth of Christ, the use of an astrolabe is extremely significant, for the birth of Christ is associated with the cosmic appearance of the star of Bethlehem. Thus, the depiction of the star in this painting is not only to be explained within its Biblical context but also within a semi-

<sup>5</sup> For a depiction of Ptolemy holding an astrolabe and dressed as the astrologer in the Vienna Genesis' miniature, see Fortini Brown (1996: fig. 136; the portrait of Ptolemy was painted ca. 1453).

<sup>6</sup> For a discussion on this miniature see Guthrie (1995: 156-64).



scientific context, aiming at understanding the birth on a cosmic level, most probably as a symbol for a beginning of a new era.

Filippino Lippi's depiction of the astrologer holding an astrolabe under his arm, the astrologer's distinctive and observant stare, and the certain intense expression on his face – as opposed to the devoted and obedient expression of the Kings – suggest, then, an additional and novel manner, by which this Biblical scene might be read.

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