



Intorno al Papiro di Artemidoro

III. I disegni

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P.ARTEMID. AND C. SIMONIDES' ORIGINAL DRAWINGS

1. STYLE VS. ICONOGRAPHY

To ancient and modern art historians, style and iconography are very distinct notions. To some philologists, to which I should add a handful of modern art historians, the difference between style and iconography is not very clear. From a methodological point of view, for instance, iconography only rarely allows scholars (archaeologists and art historians) to chronologically define a picture, a statue, a drawing, a painting, or a bronze. In order to pinpoint an absolute chronology we need more information about the object in question. Style specifically permits the framing of an object into a reliable historical period, when we do not have enough information on the archaeological context. Defining style and stylistic features of a portrait or a statue is not so different from paleography or writing style on stones, inscriptions, and papyri: a portrait of an old man is dated thanks to, and through, stylistic features and, in some cases, residual traces of tools on the surface. On the other hand, a letter like an epsilon is always considered as an epsilon and thanks to palaeographic features, tools, and supports one can better define periods or geographical areas.

This abuse of iconography, used instead of stylistic analysis to determine date and hand, is what Luciano Canfora and Richard Janko (philologists), Maurizio Calvesi and Anna Ottani Cavina (modern art historians) have committed in their works on the drawings of the Artemidorus Papyrus (*P.Artemid.*).

The scholars in question compared some drawings on the *recto* and *verso* of the *P.Artemid.* to modern drawings. Based on an iconographic –

and not formal and technical – comparison between the *P.Artemid.* drawings and the plates of the *Encyclopédie* (1751-1772, including eleven volumes of plates)¹, drawings by Francisco J. Goya (1746-1828)² and Gustave Moreau (1826-1898)³, these scholars concluded that the drawings on the Papyrus are a modern forgery.

Anna Ottani Cavina proposed to compare the drawings on the *recto* with the works by G. Moreau. This hypothesis is not convincing since the techniques and the tools used by Moreau are completely different from technique and tools on *P.Artemid.*: the modern artist used leadpoint, pencil, *pennini* on paper or beige paper, as one can detect on the magnificent book by Mathieu (*Fig. 1*)⁴. The scholar singled out the difference between the head R2, characterized by veristic traits, and R20, more idealized and closer to the modern taste: according to her conclusions, R20 recalls anti-naturalistic motifs by Ingres and Moreau, and not ancient monuments. Ottani Cavina concludes stating that: «[...] elemento di perplessità è lo scarto fra disegni descrittivi e veristici (quale la testa indicata come R2) e disegni abbreviati e di sintesi (la testa R20): due stili diversi, lontani nei tempi e nei modi [...]. L'ipotesi di una datazione molto più tarda di questi disegni, in pieno Ottocento, sarebbe confermata [...] anche da quella testa di profilo, anomala e accattivante, più vicina alla sensibilità moderna (R20), chiusa da un segno compendiario e deciso (la linea della fronte e del naso) e da un contorno falcato (nella definizione della parte inferiore del volto) che richiama quel modo di trascrivere la

¹ Canfora, *Papiro*: the comparison between the two sets of drawings is not discussed; according to the scholar, there should be a sort of resemblance. On a close inspection, however, the drawings on *P.Artemid.* appear totally different in technique (etching) and visualization. On technical aspects see *P.Artemid.*; Adornato, «Goya, Bramante» and «Drawings»; Elsner, «P.Artemid.»; Whitehouse, «Drawing».

² Canfora, «Che ci fanno», 79: «Altri disegni sul 'verso' del rotolo: schizzi ('alla Goya' si potrebbe dire) di lotte tra animali, disegni di pesci e di bestie rare o fantastiche. Il disegnatore si burlava dei posteri? O dimostrava una 'pratica di bottega' assolutamente insolita». On zoology and representations of animals in ancient time, see Adornato, «Animali» and «Didascalie»; Kinzelbach, *Tierbilder*; Lehmann, «Skizzen»; on paradoxography and animals see Irene Pajon Leyra in this volume with bibliography.

³ Ottani Cavina, «Un Papiro», proposed to compare the drawings on the *recto* with the works by G. Moreau. Her analysis must be rejected, since no stylistic and formal comparanda could be addressed; furthermore, the peculiar, technical aspects are surprisingly overlooked.

⁴ Mathieu, *Gustave Moreau*; the comparisons proposed by Ottani Cavina «Un Papiro», appear very weak and not entirely convincing.

realtà, in termini stilizzati e antinaturalistici, che avvicina il purismo di Ingres all'estetismo di Gustave Moreau e dei Preraffaelliti»⁵. To her, the combination of two different styles and formal aspects on the papyrus necessarily implies the adoption and influence of more recent drawings: according to her analysis, the juxtaposition of these two sets of formal traits are not conceivable in ancient art. Just to mention a factual counter-argument, the marble funerary *kline* from Nea Potidaia⁶, however, dating around the last decade of the 4th century BCE, presents several painted figures, human beings and animals, and decorative patterns: on the upper frieze, on the left, for instance, a female figure with a swan and, in the middle, a silen with a vase, a rhyton (Figs. 2-3). In the case of the female figure (Aphrodite), the artist adopted a 'linear' treatment of the contour; lines and colors are reserved to the dress. On the contrary, for the silen the drawer uses lines and etchings on the body and on the mantle, and diluted color on the rhyton and other parts of the body; furthermore, the head of the silen is characterized by not ideal forms and traits, in contrast with the straight profile of the goddess. It is evident that the painter adopted two different formal solutions in order to convey peculiarities and specific elements of the two figures. In addition to the previous technical solutions, on the middle panel of the same couch, griffins attacking a deer are colorfully painted (Fig. 4): the contour and the details of the animals (the feathers, for instance) are traced in a dark, black line.

Going back to the hypothesis by Ottani Cavina on differences in traits and styles in ancient and modern times, we conclude that the archaeological evidence, as the painted *kline* from Nea Potidaia, allows us to reject her analysis and conclusions: as already discussed, on the same monument the ancient artist adopted differentiated nuances of drawing and painting, using linear trait, etching, shadows, colors. Furthermore, as far as I checked in Moreau's corpus, it is impossible to accept the comparisons, hypothesis and conclusions by Ottani Cavina: the profiles of the heads, the technique, the rendering of the *sfumato*, the tools are different and can not be compared with the drawings on the papyrus.

Maurizio Calvesi, on the contrary, compares the drawings on the Papyrus with the works by Albrecht Dürer and Jacques-Louis David and does not talk about technique and tools. To him, the head R2 resem-

⁵ Ottani Cavina, «Un Papiro».

⁶ Thessaloniki, Archaeological Museum; Moreno, «Capriccio»; Cohen, *Art in the Era of Alexander*, 97-99.

bles the Terme Boxer (to the scholar, this bronze sculpture is a Roman statue!)⁷ and the neo-classical drawings by David (*Figs. 5-6*). The comparison between the head of Nicodemus by Dürer and the head R2 looks highly problematic in terms of style, form, technique and for this reason his hypothesis must be rejected⁸. As it appears very clearly from the comparisons proposed by Calvesi in his investigation, the drawings on *P.Artemid.* (and the head R2, in particular) present a totally different treatment in tracing lines, etching, and shadows and, from a methodological and technical point of view, the *comparanda* are not well chosen in order to corroborate his arguments. Actually, it makes even clearer that the drawings on the papyrus have not formal, technical and stylistic analogies and comparisons in modern times.

Luciano Canfora and Richard Janko went further and identified in these drawings the very hand of Constantinos Simonides, a well-known forger of the 19th century⁹.

The inevitable first question, then, is whether it is possible to date drawings on papyri. Which methodological instruments and stylistic comparisons are admissible (or not) to judge the genuine nature or the forgery of these drawings? Three fundamental features must be satisfied: tools, ink, and support. In addition, we can take into account stylistic and formal elements, in case of a papyrus with drawings. It is the case of a very well known papyrus of the Zenon Archive (*P.Cair. Zen. 4 59706v*)¹⁰, on which an Apollo or a male figure playing a kithara is depicted and traced with a not fluent line (*Fig. 7*). In tracing the left arm with the voluminous kithara the drawer is not aware of the right proportions and the left arm appears elongated and not carefully rendered. Furthermore, in the lower part of the papyrus, it is evident the drawing of an unfinished arm: also in

⁷ Calvesi, «Artemidoro». Roma, Museo Nazionale Romano di Palazzo Massimo, inv. n. 1055, dating in the early Hellenistic period, perhaps 3rd BC; see Daehner - Lapatin, *Power and Pathos*, 223, n. 18, with bibliography.

⁸ Calvesi, «Artemidoro»: «[...] questa strana barba, pettinata lungo la gota in direzione della nuca, è un elemento classico che possiamo trovare nella scultura romana (si veda il Pugile delle Terme, Museo Nazionale Romano) come nei disegni neoclassici, proprio di David tenendo anche presente il gusto del maestro per i profili dell'antico; ma nel complesso a me sembra che l'impronta severa della figura richiami soprattutto Dürer, come potrebbe suggerire un confronto con la testa di Nicodemo nel Compianto di Monaco, Alte Pinakothek, o anche alcune delle teste barbute che così frequentemente compaiono nella grafica düreriana».

⁹ Canfora, *Il Papiro*; Janko, «Review».

¹⁰ Cairo, Egyptian Museum, inv. CG 59706 Ro (cm 34 × 23); Horak, *Illuminerte Papyri*, 234 (= ViP 76).

this case the line of the contour is not continuous and fluent. Thanks to the paleography of the papyrus we can easily date it (and the drawing) to the third quarter of the 3rd century BCE: the chronology based on technical aspects matches the stylistic traits of the face of Apollo, as it looks very close to the Ptolemaic portraits of the same period ¹¹.

I believe that these aspects allow us to identify and highlight technical, formal and stylistic differences between the drawings on the Papyrus and medieval-modern executions, not thoroughly discussed in the previous articles and contributions.

The drawings on *P.Artemid.* were executed with vegetal ink diluted with water in different proportions in order to allow different nuances of black. Two types of styli were used. Combinations of different inks and styli allowed a variety of hatchings and *chiaroscuro*. These techniques were widespread and used during the whole of Antiquity, as the entire corpus of illuminated papyri demonstrates ¹².

Technical differences in tools, ink, and support can be clearly detected in later works, particularly in medieval times. In the 13th century Villard de Honnecourt realized more than 250 drawings on parchment leaves; the preliminary drawing was sketched in lead point and the contour was then reinforced with a light sepia wash ¹³. In modern times artists explored new techniques and tools. Parchment was replaced by paper, while bistre (brown, transparent pigment made from boiling the soot of wood) and pencils were used for line tracing. Since, for example, Canfora has called the animals on the Papyrus's *verso* «alla Goya», it is important to recall that Francisco J. Goya used a «carnet de bolsillo, en papel holandés azulado, encuadernado en el sentido de la altura». In short, Goya's drawings were realized by pencil and iron gall ink ¹⁴. If the meaning of the expression «alla Goya» indicates that a modern artists was inspired by the animals made by Goya, then we have to conclude that the animals on *P.Artemid.* are totally different from those by Goya, from stylistic, technical, creative points of view.



¹¹ Smith, *Hellenistic Royal Portraits*.

¹² Horak, *Illuminierte Papyri*. See in this volume the important contribution of Helen Whitehouse and the unpublished drawings on papyri from Oxyrhynchus.

¹³ On Villard de Honnecourt see *Villard de Honnecourt*. On this topic Scheller, *Exemplum*; Elsner, «P.Artemid.».

¹⁴ On these issues see Pérez Sánchez - Sayre, *Goya*, 112; Adornato, «Goya, Bramante».

Jas' Elsner

BACKGROUNDS AND SHADOWS IN THE ARTEMIDORUS PAPYRUS

I should open by stating some assumptions and problems. Since they came to scholarly light in the late 1990s and their *editio princeps* in 2008, the pictures in the Artemidorus Papyrus have attracted far less discussion than they deserve among archaeologists and art historians because of the intense and unrelenting argument about the authenticity of the papyrus (which has primarily focused on questions of the text) and the fear among our disciplinary brethren that they would be making fools of themselves if they engaged with the object before certainty that it was not a fake had arrived¹. Well, authenticity is not likely to be unequivocally proved, and the certainty of forgery is not likely to be irrefutably established – since the kinds of evidence we have are in the realm of likelihood, probability and plausibility rather than of clear-cut proof. In the end – perhaps quite a few years from now – a consensus will firm up one way or the other; which may last or may itself be opened to question in due course. Meanwhile, and at the risk of making a fool of myself, I am going to assume that – until the parties arguing for forgery come up with better and more convincing evidence than they have to date – the papyrus is genuine and the questions its images raise are of exceptional interest and value to the general study of Greco-Roman art.

However, a word of caution is necessary for any neophyte about to be initiated into the highly polemical mysteries of studying the papyrus. It is certainly the case that, while the *editio princeps* will be for some time to come, perhaps forever, our fundamental resource, it is crucially flawed

¹ One item is Lehmann, «Skizzen». By contrast, there has been more work on the map – notably Talbert, «P.Artemid.» and the essays in *P.Artemid.* 2.

in several respects. First, the editors have restored the fragments in the wrong order, and have therefore published the papyrus in a way that is thoroughly confusing. It is, following two independent suggestions put forward in 2009 and now supported by technical evidence, certainly the case that the fragment known as section *a* should follow that known as section *c* rather than preceding it (as was the assumption of the first editors)². That is, the order of the fragments (looking at the *recto*), as proven by a number of mirror images that were transferred from *recto* to *verso* and from *verso* to *recto* when the papyrus was rolled and for some reason got wet (but which the original editors did not notice), is not *a*, *b*, *c*, *d* but *b*, *c*, *a* with *d* hanging loose and not directly attached to any surviving part of the roll³. All this makes a great deal of difference if we try to think about the sequence of images and their potential relations to each other and of course it means that the now canonical numbering of the images on *recto* and *verso* is no longer sequential, just to add to the confusion.

Moreover, the art historical study of the papyrus is particularly difficult because of the lack of access to the original, which has hardly been on display and which is in any case not so easy to see clearly. We are reduced in this case to using photographs, and especially the digitally-enhanced images made available by both the printed volumes of the *editio princeps* and its CD. Now these take us into a modern technological and methodological minefield, especially because the first edition failed to publish a full account of the metadata about how its images were made. We have no answers to questions such as: are the published images composites? Where were digital joins made? What is the level of intervention and interpretation that passes for purely empirical fact-gathering and presentation? What is the extent of simplification when digital enhancement removes 'background noise' (such as the natural ridges of the papyrus texture)? Might it also remove some of what was intended by a draughts-

² Nisbet, «P.Artemid.» and especially the long argument of D'Alessio, «On the Artemidorus» and «Further Reconstructions» and Tarte, «The Digital Existence». The argument is grudgingly accepted with quite a bit of wriggling by Gallazzi - Kramer, «Fünfzehn Monate Diskussion», esp. 216-220. Most of those who accept the papyrus as authentic accept D'Alessio's arguments for rearrangement: e.g. Bastianini, «Sull'avvolgimento», esp. 220-221; Porciani, «Il Papiro»; Pajón Leyra, «Artemidorus», esp. 336.

³ See the summary by D'Alessio, «Further Reconstructions», 295, 301-309, with his response to Gallazzi - Kramer, «Fünfzehn Monate Diskussion», and Porciani, «Il Papiro».

man or painter⁴? These kinds of interpretative decisions, based on unstated assumptions (such as the mistaken order of the original papyrus, for example) determine the primary material with which we work, in the case of the Artemidorus Papyrus, and not just the secondary scholarship that focuses our interpretations. This makes the art history of the papyrus not only fraught but also rather interesting. It is an intrinsically different methodological pursuit from most Classical archaeology (which deals in its ideal imagination with actual find-spots and real ancient objects) and more akin to the ways anthropology is always working with field reports and ethnographic observations that inevitably include the judgments and prejudices of the subjective worker in the field.

However, putting aside what may seem like an excessive focus on such concerns for the present, the great attraction of the papyrus art-historically is undeniable. The bottom line is that we have almost no drawings that survive from antiquity, and in this respect the papyrus gives us unrivaled evidence⁵. Moreover, unlike almost everything else we work on as Classical archaeologists, the papyrus's images – because of their very recent discovery – have no literature of a century and a half in all the European languages with which to burden us as we try to understand them. We are on almost virgin territory with not much more help than our own wits can afford.

1. SHADOWS

Let me begin with the question of shadows⁶. Both the drawings of the *recto* and the *verso* give repeated evidence of some sophistication in the use of ink washes and line-drawing to delineate the illusion of volume and shape within the visual regime of monochrome naturalism on the two-dimensional surface⁷. In ancient technical language, this is the arena

⁴ A series of problems have been acutely outlined by Tarte, «The Digital Existence».

⁵ In every aspect of this paper I am fundamentally indebted to both the illustrations and the discussions in *P.Artemid.* For much useful material on the animals of the *verso*, see also Kinzelbach, *Tierbilder*.

⁶ The fullest discussion to date *P.Artemid.*, 314-317 on the *verso*, and Adornato, «I disegni», focusing on the *recto*.

⁷ For discussion of these issues in ancient art, of course before the discovery of *P.Artemid.*, see Bruno, *Form*, 23-44, esp. 42-44 on monochrome which in the ancient

of *skiagraphia*, or 'shadow-drawing'⁸, with its associated terminology of *tonos* (or the relations of light and highlight with shade)⁹, so long as we mean by this – in the context of the monochrome images of the Artemidorus Papyrus – issues of shading specifically rather than the use of colours to effect shadows¹⁰.

Take for instance R12 and R13, the drawings of a hand and a foot respectively (*Figs. 1* and *2*) We may not wish fully to endorse the competence of the artist's draughtsmanship (and indeed we may wish to affirm the supposition that these are neophyte sketches), but the idiom being executed – that is, the attempt to use light and shade to render volume in terms of three-dimensional illusionism on the flat surface – is quite clear¹¹. This idiom, clearly reminiscent of Renaissance practice, differs markedly from the schematic drawings in Egyptian style on the squared late Ptolemaic Berlin papyrus, of broadly similar date and provenance to the Artemidorus Papyrus¹², which use outline and line-drawing to differentiate some textures (like hair or feathers) but no shading to intimate volume. Indeed, the Artemidorus drawings are less reliant on pure outline than the sketches on our other monochrome papyri in Hellenizing styles, such as the Cupid and Psyche in Florence (where some shading is implied by lines)¹³, the fragment from a narrative scene in Munich¹⁴, the Gryllus sketches now in Oxford¹⁵, the impressive fragment of a perspectival architectural drawing with Corinthian columns from Oxyrhynchus only

literature on art was specifically related to the figure of Zeuxis (Pliny *Nat. Hist.* 35, 64), as was the «law of light and shadow» (Quintilian *Inst. Or.* 12, 10, 4). Further on monochromes: Bruno, *Hellenistic Painting*, 42-54.

⁸ See e.g. Pollitt, *The Ancient View*, 217-224, and esp. Rouveret, *Histoire*, 11-63.

⁹ See Pollitt, *The Ancient View*, 224-226; Rouveret, *Histoire*, 47-48.

¹⁰ On questions of colour, see Keuls, «Skiagraphia», *contra* Pemberton, «A Note», and Bruno, *Form*, 14.

¹¹ If the *recto* images represent drawings made from casts, as suggested by Adornato, «I disegni», 482-493, then this parallels the practice of modern instruction manuals: see Sparkes, *How to Shade*, 39-49 (chp. 9, «On shading from the cast»).

¹² *P. Berol.* 13558; Erman, «Zeichnungen»; Scheller, *Exemplum*, 91-93; *Tre vite*, 287 (G. Adornato); Adornato, «Drawings».

¹³ PSI VIII 919; Bassi, «Amore e Psiche»; Horak, *Illuminierte Papyri*, n. 113; *Tre vite*, 288-289 (A. Soldati).

¹⁴ *P. Monat.* II 44; Frangini - Martinelli, «Una scena»; Frangini - Martinelli, «Papiro figurato»; Horak, *Illuminierte Papyri*, n. 119; *Tre vite*, 292-293 (A. Soldati).

¹⁵ *P. Oxy.* XII 2331; Hammerstaedt, «Gryllos», esp. 36-41, and Nisbet, «Barbarous Verses».

published in 2007¹⁶, or any of the papyrus sketches in Ulrike Horak's volume of 1992, which remains the best collection of comparanda¹⁷.

As Ernst Gombrich reminds us at the opening of his classic paper on *The Heritage of Apelles*, «in life and in art the distribution of light and shade helps us to perceive the shape of things»¹⁸. Or, as W.E. Sparkes' classic handbook of 1900 tells the aspiring artist, «although objects can be well represented on a flat surface by means of accurately drawn outlines, we find it impossible to express their solidity and the character of their surfaces without the addition of light and shade»¹⁹. As Gombrich pointed out, the use of shadow to characterize volume and shape is fundamental to Renaissance art²⁰, and is well attested in a series of texts from within antiquity that discuss the topic as well as in many of the polychrome wall-paintings from Campania²¹. But in the Artemidorus Papyrus we have powerful evidence of the development and teaching of such techniques in the rendering of body-parts in ancient art. Beyond hands and feet, shading gives depth and volume to faces (e.g. R1 and R23, *Figs. 3 and 4*) and also, perhaps rather crudely, to draperies (R14 and R10, *Fig. 5*). None of these is the complete image of a person, so much as an attempt to sketch a part of one. But the same observation may be made of the more competently executed drawings of animals on the *verso*, which are complete images and vignettes, rather than the parts of bodies, and are surely by a different set of hands. For instance the

¹⁶ *P.Oxy.* LXXII 4842; Whitehouse, «Drawing», esp. 301 and 304-306 (a long note by J. Coulton).

¹⁷ Horak, *Illuminierte Papyri*.

¹⁸ Gombrich, *Heritage*, 3-18, quote from p. 3. On the importance of shadow and shading to illusion, Gombrich, *Art*, 34-38, 185-186. More generally, Gombrich, *Shadows*; for developments in these issues after the eighteenth century, Baxandall, *Shadows*; for a lively history of art and shadow, Stoichita, *Short History*, esp. 11-29 on antiquity; for questions of synthetic shading in the post-photographic era, see Mitchell, *The Reconfigured Eye*, 137-161.

¹⁹ Sparkes, *How to Shade*, 7.

²⁰ See esp. his 1964 paper «Light, Form and Texture in Fifteenth-Century Painting North and South of the Alps» in Gombrich, *Heritage*, 19-34.

²¹ Gombrich, *Heritage*, 5-18. The texts he cites include: Longinus *De Subl.* 17, 2; Cicero *Academica* II 20 and 86; Pliny *Nat. Hist.* 35, 29, and John Philoponus *Commentary on Aristotle's Meteorologica* A5 (Arist. *P.* 342b 14) in M. Hayduck (ed.), *Ioannis Philoponi in Aristotelis Meteorologicorum librum primum commentarium* (= *Commentaria in Aristoteles Graeca* 14), Berlin 1901, 73; to which may be added Aristotle *Rhet.* 1414a; Quintilian *Inst. Or.* 12, 10, 4, and Plutarch *De Glor. Ath.* 2; Philostratus *Life of Apollonius* 2, 22, 4 (on light and shade in monochrome in relation to portraiture).

kriagron (V4, Fig. 6) shows deft use of shading to render the curvature of its rump and belly as well as the shadowed side of its head, caused by the particular attitude struck by the animal's turn of its head. Likewise the *keklikos* (V15, Fig. 7), a kind of round fish, is nicely evoked in its rotundity by the brushed shading at the top right and bottom of the image.

However, the use of line and wash on the *verso* is far more versatile than on the *recto*. In the latter, there is some differentiation of textures (for instance in the different hair styles of the heads depicted – compare R2, R21 and R23, respectively Figs. 8, 9 and 4), but on the *verso* – in the context of monochrome illustration – many more effects are achieved through the play of shadow and line-drawing. I have already mentioned the rendering of volume and shape – for instance in the *chenalopex* (V8, Fig. 10) or the fight of the lynx and the wild goat (V38, Fig. 11) in which the points on the neck and snout of the goat where there is no ink wash form a contrast of light – especially to the deep shadow at the back of the animal's neck and upper back. In this case, the shading is less to stress the play of shadows than to highlight the places where light falls most strongly – the light itself signaled by the papyrus-ground untouched by ink. This is, at the least, competent work, skillfully and confidently handled in a medium of realistic representation well established, taught and executed in the milieu in which the papyrus was made.

But, equally, shading is used to differentiate colours on different parts of an animal's body, for instance on the fishes called *sauros* (V39, Fig. 12) and *physalos* (V40) where in both cases the full shading on the upper part of the fish indicates a darker colouring while the line of shadow at the bottom implies the curve of its belly in the water. Pen-work is used to imitate surface markings, such as in the fish called *hierax* (V11, Fig. 13) with its spotted upper part on what looks like a slightly darker ink-wash ground than the belly, or the *astrokyon* (V29, Fig. 14) whose dots play on the starry effect of its name. Indeed, both techniques may be used together as in the giraffe (V21, Fig. 15) where the skin markings are rendered with small circles, but subtle shading along the right-hand parts of the forelegs, the back, the neck and the rump give a powerful sense of voluminous presence in space, the *myrmex* (V22, Fig. 16) with its spotted legs and rump and its wings with feathers emphasized by line-drawn 'v's, and the tiger (V31, Fig. 17), the inside of whose left rear leg is in deeper shadow than the rest. Likewise, various forms of cross-hatching and shading are used to indicate feathers – for example in the case of the *aigilops* (V12, Fig. 18), where the vertical lines of the upper

part are deliberately in contrast with the horizontals of the lower body, to imply different laying of feathers, the delicate drawing of the *hydroskopos* (V14), the *ostraceus* (V26), whose different fall and texture of feathering are nicely caught by the differentiated drawing techniques, the *keratinos* (V27) and the *myxos* (V28, Fig. 19).

For an ancient commentary on the high valuation of such shadow-play – admittedly from nearly three centuries after the most likely date of the papyrus in the first century BC – we may turn to the *Imagines* of Philostratus, a series of remarkable descriptions of paintings written in the early third century AD and purporting to describe the panels in a prestige private gallery in a villa just outside Naples. After praising painting in his proem for being «imitation by use of colour» and for achieving more with this one means than the plastic arts with their many means, Philostratus defines it specifically as an art that «shines in the use of shadow (σκιάν τε γὰρ ἀποφαίνει)» (I Proem 2). In the discussion of the image of Narcissus, a passage obsessed with the complexities of mimesis, its deceptions and the problems of the gaze, Philostratus twice emphasizes shadow in his pseudo-technical account of the artist’s rendering of the protagonist:

The arm shows an open space at the point where the elbow bends, a wrinkle where the wrist is twisted, and it casts a shadow as it ends in the palm of the hand, and the lines of the shadow are slanting because the fingers are bent in. (I 23, 4)²²

In his account of a picture of Heracles and Atlas (II 20, 2), Philostratus writes:

It is not particularly worth admiring (οὐπω θαυμάζειν ἄξιον) the shadows (σκιὰς) on Heracles, if they are vigorous – for the forms of people lying down or standing erect are easy to shade (μάλα εὐσκιου), and to do them accurately is not particularly skillful (οὐπω σοφόν) – but the shadows (αἱ σκιαί) on Atlas show a high degree of skill (σοφίας πρόσω). For the shadows on a crouching figure like his run into one another, and do not darken any of the projecting parts but produce light on the parts that are hollow and retreating. The belly of Atlas, for instance, one can see although he is bending forward, and one can perceive he is panting.²³



²² We may add that the subsequent use of the word ‘shadow’ (σκιά, also at I 23, 4) to mean the reflection of Narcissus, that gazes back at him and with which he falls tragically in love, is deliberately designed to complicate edgily the technical art-historical implications of shadows as animating a two-dimensional image with the powers of illusion.

²³ Interestingly, panting also comes up in relation to the shadows of Narcissus at I 23, 4. Again, shadows appear to animate and vivify the pictorial image.

Irene Pajón Leyra

PARADOSSOGRAFIA VISIVA SUL PAPIRO DI ARTEMIDORO

Il Papiro di Artemidoro è un oggetto straordinario per molte ragioni, ma una delle più rilevanti è la particolare collezione di disegni zoologici che occupa il suo *verso*. Molte delle figure che vi si rappresentano sono facili da identificare, come per esempio la tigre o la giraffa. Per molte altre, invece, mancano referenti reali. In generale, a parte il fatto che gli esseri rappresentati siano reali o meno dal nostro punto di vista, tutte le figure si caratterizzano per una natura esotica e sorprendente, il che ha condotto a descrivere la collezione di figure come «paradossografia visiva»¹, mettendola in rapporto con un tipo di letteratura, la paradossografia, il cui scopo principale è, precisamente, la sorpresa e la perplessità.

La paradossografia è un genere letterario che si sviluppa fin dall'inizio del periodo ellenistico e consiste nell'elaborazione di liste o cataloghi di rarità e meraviglie, che provengono sempre dalla lettura di opere storiche o da trattati di scienza naturale². I contenuti di queste liste si compilano esclusivamente per il loro carattere sorprendente e appartengono principalmente a tre ambiti tematici diversi: (1) abitudini curiose dei diversi popoli barbari; (2) fenomeni naturali strani, soprattutto relativi all'idrologia (fiumi o fonti speciali, ecc.); (3) direttamente legato all'aspetto che stiamo trattando, le particolarità della fauna e della flora

¹ Elsner, «P.Artemid.», 50, parla di «visual paradoxography». L'idea, anche se non formulata in questo modo, è già presente nell'*editio princeps* (P.Artemid., 323, dove pure si considera la possibilità di eventuali fonti paradossografiche) e ancora prima (Adornato, «Animali», 116).

² Giannini, «Studi II», 99-100; Jacob, «De l'art», 121-123; Sassi, «Mirabilia»; Schepens, «Ancient», 380; Gómez Espelosín, *Paradoxógrafos*, 7-37, specif. 26-35; Pajón Leyra, *Entre ciencia*, 29-33.

dei paesi lontani. La somiglianza tra la collezione di animali del papiro e quest'ultima varietà della letteratura paradossografica ha permesso che sia definita nel modo che abbiamo indicato sopra, ma bisogna tener conto che, nonostante questa similitudine nel tema trattato, non si trova nessuna coincidenza concreta tra i disegni del papiro e i testi paradossografici che ci sono arrivati. Quindi, sorge la questione della misura in cui si può vedere un legame certo tra la paradossografia e la collezione zoologica del papiro, se non ci sono tra loro materiali comuni.

La natura paradossografica di un testo, però, non si definisce soltanto per i suoi contenuti, che sempre provengono da testi di altri generi dove le stesse storie e aneddoti erano già presenti, ma dipende piuttosto dal trattamento di questi contenuti e dalla forma in cui si presentano³. Il lavoro del paradossografo non consiste soltanto nella scelta degli oggetti del suo catalogo di rarità, ma pure nel metodo di lavoro sui testi che raccoglie, che potenzierà l'effetto di perplessità e sorpresa nel lettore. Dunque, la nostra proposta è comparare il metodo di lavoro dei paradossografi nella compilazione delle loro opere e quello dell'anonimo disegnatore delle figure zoologiche, allo scopo di verificare se il trattamento e la disposizione dei materiali permettono di apprezzare paralleli che possano sostenere l'esistenza di una paradossografia visiva sul papiro al di là della somiglianza tematica. Essendo coscienti della distanza tra testi e immagini e della natura letteraria della paradossografia, vale la pena, comunque, analizzare i possibili paralleli metodologici, che forse aiuteranno a capire la natura e lo scopo di questa particolare serie di disegni.

1. LA PARADOSSOGRAFIA E IL SUO METODO: CARATTERISTICHE PRINCIPALI

La letteratura paradossografica è, secondo le parole di Christian Jacob, prima di tutto un «gioco di seconda mano»⁴, vale a dire, che il paradossografo di solito prescinde della sua esperienza, e invece compone le sue liste di rarità dai materiali che gli forniscono le sue letture, sempre riconoscendo l'autorità e affidabilità delle fonti usate⁵.

³ Jacob, «De l'art», 122, e Sassi, «Mirabilia», 449-457, sulla presenza di contenuti meravigliosi in testi non paradossografici.

⁴ Jacob, «De l'art», 122: «[...] jeu de la seconde main».

⁵ Schepens, «Ancient», 383-389.

Tra l'originale (o gli originali) che il paradossografo sceglie e il suo riflesso nella lista paradossografica, i materiali attraversano un processo di rielaborazione e riassunto, da cui dipende in grande misura l'apparenza straordinaria degli aneddoti. Questa rielaborazione consiste nella scomparsa di quanto potrebbe far diminuire lo stupore del lettore: le spiegazioni razionali, gli esempi di casi simili o le manifestazioni di dubbio o sfiducia da parte dell'autore sono diligentemente eliminati, al fine di lasciare una descrizione breve e sintetica dell'oggetto sorprendente, isolata dal suo contesto iniziale⁶.

Come risultato della mancanza di contesto, i testi paradossografici presentano sempre l'apparenza di una raccolta discontinua di elementi indipendenti gli uni dagli altri. Al contrario di quello che succede nei racconti di viaggi, nei testi storiografici o nelle descrizioni corografiche, il paradossografo compila un catalogo di curiosità in cui ogni elemento manca di connessione con il resto.

Questa mancanza di filo conduttore, però, non significa che le liste paradossografiche non abbiano una certa struttura compositiva: Schepens⁷ insiste nell'importanza dell'organizzazione sistematica nella letteratura «di antiquario» e distingue principalmente quattro criteri che servono a dare una struttura ai cataloghi di rarità: l'organizzazione alfabetica, quella bibliografica, cioè, secondo le fonti usate, quella tematica e quella geografica. Tra questi criteri l'autore sottolinea la rilevanza speciale dei due ultimi, locale e tematico, presenti nella maggioranza dei testi paradossografici, e soprattutto in quelli più antichi⁸. Forse si potrebbe obiettare alla visione di Schepens che le liste paradossografiche che ci sono note raramente appaiono come un elenco perfettamente organizzato e rigorosamente sistematico conforme a uno di questi criteri o a una combinazione chiara di quelli. Piuttosto si potrebbe parlare di una sovrapposizione di ordini, sottomessi a volte all'effetto di sorpresa o guidati dall'associazione di idee. Ma, nonostante ciò, le liste di paradossografia non sono mai un insieme anarchico e aleatorio.

Per quanto riguarda le fonti⁹ della paradossografia, di solito i testi utilizzati appartengono a due categorie principali: da un lato, i parados-

⁶ Questo metodo viene spiegato in dettaglio in Jacob, «De l'art», 130-135.

⁷ Schepens, «Ancient», 394-398, seguendo Momigliano, *The Classical*, 59-62.

⁸ Il criterio geografico appariva nell'opera di Callimaco (*Sud.*, s.v. Καλλιμάχος; Θωμάτων τῶν εἰς ἅπασαν τὴν γῆν κατὰ τόπους ὄντων συναγωγῆ). Sul criterio tematico e bibliografico in Antigono, Schepens, «Ancient», 396.

⁹ Su questo punto, Pajón Leyra, *Entre ciencia*, 265-288.

sografi cercano gli aneddoti in testi di natura storiografica e geografica che parlano di territori lontani. Ma, d'altro lato, la nascita della più antica letteratura di questo genere, maggiormente quella che si occupa del mondo animale, ha uno stretto rapporto con la scienza aristotelica¹⁰ e, quindi, tra le fonti che usano i paradossografi, soprattutto Callimaco, Antigono e Pseudo-Aristotele, i testi di scienza naturale del Liceo hanno un posto speciale, sia quelli del maestro o quelli che provengono dai suoi discepoli, in particolare Teofrasto¹¹. Nei periodi successivi questo rapporto tra paradossografia e Liceo si va man mano diluendo, ma comunque l'eco della scienza aristotelica rimane sempre sullo sfondo. Si deve insistere, tuttavia, sull'enorme distanza che c'è tra l'intenzione classificatoria ed esplicativa delle opere dei primi peripatetici e la paradossografia, concentrata soltanto sui dati in se stessi, gli aneddoti particolari, senza una volontà di approfondire l'esame dei problemi o cercare le cause dei fatti.

Presentazione dei materiali in forma di raccolta discontinua, la biologia del Peripato sullo sfondo, anche se deformata e semplificata, dipendenza da fonti scritte, che sono profondamente rielaborate, e coerenza interna, di solito attraverso un'unità tematica o locale, sono le principali caratteristiche della letteratura paradossografica, oltre il contenuto consistente nella raccolta di meraviglie. Vediamo adesso se queste caratteristiche hanno una corrispondenza nei disegni zoologici del Papiro di Artemidoro.

2. RACCOLTA DISCONTINUA DI ELEMENTI INDIPENDENTI

Iniziamo questa revisione dei possibili paralleli metodologici tra la letteratura paradossografica e la serie zoologica con la caratteristica più facile da riconoscere nei testi di paradossografia: il carattere discontinuo.

Così come i diversi elementi dei cataloghi paradossografici sono indipendenti, anche i disegni del *verso* del papiro mancano di connessione tra di loro: ogni animale o gruppo di animali ha un ambiente proprio, scollegato dagli altri.

¹⁰ Sul rapporto tra paradossografia e scuola di Aristotele, Giannini, «Studi I», 259; Jacob, «De l'art», 135, e specialmente Sassi, «Mirabilia», 454-456.

¹¹ È colui che offre la testimonianza più antica dell'uso dell'aggettivo παράδοχος nel senso che avrà nella paradossografia. Cf. Thphr. C.P. II 17, 1, 3 e 4. Su questo tipo di letteratura come una «degenerazione» o «corruzione» della scienza seria di Aristotele, Schmid - Stählin, *Geschichte*, 237.

Sul celebre mosaico nilotico di Palestrina ¹², dove si vedono rappresentati alcuni degli esseri che si trovano sul papiro, le figure s'integrano in un unico paesaggio o sul noto fregio della tomba di Marissa tutti gli animali si appoggiano sullo stesso terreno, suggerito dal pittore da una linea che va da un animale all'altro ¹³. Similmente, i mosaici e le pitture parietali che rappresentano gruppi formati da un polipo, una murena e un'aragosta, che gli editori segnalano come paralleli compositivi delle scene di lotta del papiro, presentano anche un ambiente unico che riunisce tutti gli animali rappresentati ¹⁴.

Sul papiro, invece, ogni disegno è staccato dal resto, in modo tale che i vari animali o gruppi si trovano chiaramente su suoli o dentro ambienti diversi. Ogni figura viene accompagnata da un paesaggio specifico e particolare ¹⁵. Anche se è possibile distinguere una certa tendenza, segnalata dagli editori ¹⁶, a disporre gli animali terrestri sulla parte centrale del rotolo, gli uccelli sulla parte superiore e gli animali acquatici su quella inferiore, questo non va al di là di una tendenza, che in nessun modo significa una integrazione unitaria.

Il *verso* del papiro, quindi, si caratterizza per la discontinuità delle figure e delle scene rappresentate. In questo senso gli animali su *P.Artemid.* sembrano offrire un equivalente visivo della caratteristica formale più notevole dei testi paradossografici.



¹² Meyboom, «The Nile», 41-42, e specif. 78.

¹³ Jacobson, *The Hellenistic*, 39. Per una descrizione del fregio zoologico, Peters - Thiersch, *Painted*, 23-28.

¹⁴ *P.Artemid.*, 319-320.

¹⁵ Sui diversi paesaggi rappresentati sul papiro, si veda il saggio di Elsner, in questo volume. Pure Elsner, «P.Artemid.», 49, sulla mancanza di una «narrativa comune» a tutto il *verso*.

¹⁶ *P.Artemid.*, 315-316.

Eric M. Moormann

LINEE DI CONTORNO E DISEGNI NELLA PITTURA GRECO-ROMANA

Collegamenti con i disegni del Papiro di Artemidoro

Se cerchiamo possibili collegamenti fra i disegni sul Papiro di Artemidoro e la pittura antica possiamo, in primo luogo, analizzare gli elementi iconografici e tentare di concepire uno 'stemma' dei vari temi, seguendo quanto già sviluppato da Gianfranco Adornato nei due contributi alla *editio princeps* del papiro stesso¹. Possiamo anche cercare agganci e confronti a proposito della maniera di dipingere e di delineare le figure sul papiro nel dossier delle pitture a noi note: si tratta quasi unicamente di pitture parietali e non pannelli lignei o prodotti su altri supporti. Nell'*editio princeps* è stata espressa una certa perplessità sui disegni che riguarda fra l'altro la natura delle fonti per questi disegni. Dal primo momento che ho visto il papiro e i suoi disegni, ho dovuto pensare a pitture murali antiche – e non a falsi su cui abbiamo ora un libro molto istruttivo e divertente di Delphine Burlot² – sulle quali si osservano linee tracciate in colore nero o marrone e dove il riempimento di figure fatte con questo tipo di 'contorni' è, in principio, il medesimo del fondo della composizione se non sono stati realizzati dei riempimenti con differenti colori³. È su pitture realizzate con questa tecnica che voglio porre l'attenzione in questo breve contributo.

Non esistono studi sistematici – per quanto sappia – sul disegno preliminare in rapporto con la pittura parietale o su *pinakes*. Le illustrazioni inserite nel Papiro di Artemidoro invitano a riflettere proprio su questo tema e su un possibile rapporto fra i disegni e la pittura. Per que-

¹ Adornato, «I disegni»; *P.Artemid.*, 309-460.

² Burlot, *Fabriquer l'antique*.

³ *P.Artemid.*, 599-606 su 'maniere' di disegnare.

sta occasione non mi occuperò tanto dei disegni di animali sul *verso* del papiro che trovano certi confronti nel repertorio naturalistico del tardo ellenismo, come il fregio dipinto di Marisa (circa sessanta km a sud di Gerusalemme) o il mosaico nilotico di Palestrina (Italia)⁴, quanto degli schizzi di teste, mani e piedi, cioè sulle figure umane⁵.

È ovvio che le illustrazioni del papiro sono veri e propri disegni fatti con inchiostro vegetale. Non vi sono suggerimenti di colori o sfumature che stabiliscano un'affinità tecnica con la pittura – a pannello o a parete che sia. In Egitto possediamo ben poco, se escludiamo i ritratti di mummie, che possono offrire alcuni punti di corrispondenza locali. Ma questi confronti sono poco validi nel nostro tentativo di paragone. La differenza con i ritratti di mummie giace soprattutto nella resa pittorica, con molti sfumati e colori dolci, dei *pinakes* dipinti. Inoltre, se prendiamo in esame l'iconografia delle teste, quelle del papiro a mio parere non sono ritratti – veri o ideali – ma schizzi per figure mitologiche.

Dobbiamo quindi cercare altri confronti, purtroppo fuori dell'Egitto. Se ci volgiamo alla pittura parietale stessa, ci colpisce l'esistenza di pitture a tecnica mista, cioè dell'uso di linee disegnate assieme alla pura pittura a pennello, di cui sono da notare diversi casi che a mo' di esempio presento rapidamente qui di seguito. Comincio con le metope dipinte di Cuma, di recente pubblicate da Carlo Recigno e ora esposte nel Castello di Bacoli⁶. Adornavano il cosiddetto Tempio A e sono da datare nei decenni 340-320 a.C. Questo santuario aveva un fregio dorico in tufo con una Centauromachia dipinta su uno strato di stucco bianco sulle metope, separate l'una dall'altra da triglifi azzurri. Ogni lastra ha una sola figura, un Lapita o un Centauro, mentre tocchi di paesaggi sono presenti su alcuni blocchi. Le figure hanno contorni delineati in rosso-marrone scuro, con scarse graffiature, e sono rese in tinte dolci, soprattutto rosso e azzurro di modo che l'effetto sia abbastanza naturalistico. I blocchi ζ e μ contengono un centauro che si muove verso destra (*Fig. 1*).



⁴ Jacobson, *Paintings of Marisa*; Meyboom, *Nile Mosaic*, 44-46. Cf. nota 9. Per gli animali sul papiro: *P.Artemid.*, 309-460; Meyboom, «A Tour», 95-98 (animali dall'Egitto e dall'Etiopia, più bestie fantastiche), e Kinzelbach, *Tierbilder* (Africa e Oriente).

⁵ Adornato, «I disegni», sulle figure R1-R25.

⁶ Recigno, «Metope dipinte». Per un inquadramento dell'ambito artistico Rouveret, «Etruscan and Italic Tomb Painting», in particolare 239, pl. 6.1 (datazione attorno al 340-330).

Helen Whitehouse

BIRDS, BEASTS, AND A UNICORN AT OXYRHYNCHUS

The three different aspects presented by the material on *P.Artemid.* – an unfinished illustrated text on a papyrus roll, a group of anatomical studies, and a series of drawings of creatures both real and fabulous – have generated fresh discussion on the art of drawing in the ancient world, and the purposes it may have served¹. The surviving examples of drawings on papyrus and parchment from Graeco-Roman Egypt are usually much more fragmentary in their preservation than the generous expanse of the reassembled *P.Artemid.*, but all present the same challenge in matching them to the categories of ancient drawing attested in the literature – illustrations to texts (including a prefatory portrait of the author in book rolls), teaching aids, architectural plans, students' work, and models or patterns for work to be carried out in another medium.

Amongst the fragmentary papyri retrieved from the rubbish dumps of Oxyrhynchus under the aegis of the Egypt Exploration Fund (now Society) are some 130 (roughly a third of the total number of drawings thus far identified) that are sufficiently large and recognizable in content to merit discussion. Few of these are datable: when the drawings have been executed on the reverse side of a piece of papyrus with writing on it, palaeography has provided a range of dates for the written recto from the first century BC to the sixth AD, with two distinct clusters, one in the second century and, to a lesser extent, another around the fourth. The last dated Greek document from the Oxyrhynchus dumps belongs to the 640s AD and after that there is apparently a hiatus in the life of the town and the production of written material until the appearance

¹ *P.Artemid.*, 579-616.

of documents in Arabic in the ninth century, with dated material thereafter into the fourteenth or fifteenth century². Of the total of drawings with recognizable content, 35 are clearly patterns (*paradeigmata*), mostly related to the business of textile-weaving, since they display not only the designs but also the particular shapes of ornament used therein. Annetta Stauffer has led the way in characterizing patterns like these, and their probable use³.

Another body of material with an identifiable use are the distinctive drawings in traditional style on squared grids that testify to the ongoing existence in Roman Oxyrhynchus of craftsmen executing decoration and artifacts for Egyptian temples⁴. This phenomenon can be paralleled in the textual evidence provided by the growing corpus of fragmentary papyri grouped under the modern name, «The Book of the Temple», surviving portions of a manual on how to build, decorate, and run a temple⁵. There is little amongst the other drawings that can be clearly identified as preparatory work for creations in a Graeco-Roman style, although evidence exists for draughting procedures in some of the productions for which a preliminary drawing might be thought useful. Amongst the familiar category of painted mummy-portraits is the rare example of a draught for a portrait on wood, seemingly a 'reject' panel carrying the sketch with colour notations on one side, and traces of a painting and embalming materials on the other⁶. Traces of the traditional type of squared grid can be seen underlying geometric patterns in some Graeco-Roman wall-paintings in Egypt, but such designs would not necessarily have required a preliminary drawing of the pattern, merely careful setting-out⁷.

A diagnostic feature that can be derived from the Egyptian-style drawings on grids is that the papyrus is usually blank on the reverse;

² For the suggested hiatus in occupation, see Coles, «Oxyrhynchus», 14.

³ Stauffer, *Antike Musterblätter*.

⁴ Whitehouse, «Drawing», 298-301, pl. XXIX.

⁵ For a resumé of the topics covered, see Quack, «Das Buch vom Tempel»; many of the fragments are written in demotic, but there are also some in hieratic (including fragments from Oxyrhynchus), and a Greek translation that has been dated to the second century AD.

⁶ Phoebe Hearst Museum 6/21378b: Cannata, «Funerary Artists», 602-603; for preparatory draughting in red in fresco painting, see De Cesaris - Sucato - Ricchi, «Conservation», 92.

⁷ Hope - Whitehouse, «A Painted Residence at Kellis», 322. For an earlier instance of a grid underlying figure-painting, see the example in the Persephone Tomb at Vergina: Barbet, «La technique comme révélateur d'écoles», 67-68, fig. 7a,b; Gallazzi - Settis, *Tre vite*, 40-42.

a few fragments have drawings on both sides, and some have draught grids or trial pen-strokes on the verso. A number of the drawings are on a double thickness of papyrus, made of two sheets placed together with the vertical fibres inwards, so that both outer sides can be used in the preferred direction for both writing and drawing, along the fibres⁸. For the same reason, single sheets have usually been rotated for secondary use: the double-sided drawing discussed below is unusual in this respect.

Using the criteria outlined above, the two papyri discussed in this paper might be seen to come from some context connected purely with drawing or designing: one is blank on the reverse, the other has drawings on both sides. Beyond that reasonable assumption, however, they present the usual difficulties of definition. To take first the drawing with a blank verso, which is the best of the animal drawings amongst this Oxyrhynchus group, in both draughtsmanship and preservation⁹. It shows a male caprid in profile, leaping to the right, and is executed with pen and black ink along the fibres of the papyrus (*Fig. 1*); ink has been lost in places from the rather coarse surface, and there is a vertical sheet join 8-10 mm from the right. The hoof of the animal's left foreleg has been lost where the sheet breaks off at the right-hand side, and the knee-joint is lost with a hole in the papyrus. The fragmented top edge would have contained the upper part of its left horn and further details of its right (nearside) one, too; it curves back to end in a point midway over the animal's shoulder. The animal has been deftly sketched in various thicknesses of line, the thinnest used for some of the outline and also in the application of hatching in short pen-strokes to model the body, emphasizing the outline of the back and highlighting the musculature of the neck and limbs. Hatching is also used to shade the inner view of the offside limbs, but the diagonal lines on the base of both horns most likely indicate their surface texture; at the base of the horns, between the well-delineated upstanding ears, are curls of hair. Broad crescentic strokes are used for outlining the neck and chest profile, and the shoulder joint. The curvature of the upper part of the jaw is also drawn with some emphasis, as is the eye to the right of it and the dark tuft of beard below, but apart from the end of

⁸ This would also result in a stouter sheet that could be handled more easily for consultation.

⁹ 82/28(a), to be published in *The Oxyrhynchus Papyri* 83 (2017). Apart from the other papyrus published here, none of the remaining fragments shows a complete animal, and some are so fragmentary that the original content cannot be judged: they may well have formed part of a more extensive figure composition.

the muzzle shown on the further side of the sheet join, the rest of the outline of the head is only partly preserved. The animal has a short tail with a jagged lower outline: an indication, together with the curving horns, body shape and the strikingly black outline of the shoulder and the neck and chest that this is perhaps the ibex-like wild goat with a tufted tail, one of the group (*Capra aegagrus*) with black markings at the shoulder and down the chest, and a spinal crest¹⁰. Such extensive use of hatching is not a typical feature amongst these *Oxyrhynchus* drawings, though it is seen in more economical use on the celebrated drawing of Cupid and Psyche in the Florentine holdings from this site¹¹. A comparison may be made with the more extensive use of both wash and hatching, cross-hatching, and zig-zag lines to define the contours of the hands and feet amongst the anatomical drawings on *P.Artemid.* and give them volume¹².

The double-sided drawing is on a rectangular piece of brownish papyrus composed of three joining fragments (*Figs. 2,1 and 2*)¹³. It carries a total of seven depictions of birds and animals, executed with both thick and thin strokes of the pen in brown ink, along the fibres on side 1 and across them on side 2. On side 1, from left to right, there is a bird (*Fig. 3,1a*), facing right, plump-bodied with an emphatically long and straight-edged tail and a short neck with small curves suggestive of feathers at the nape. There are two bars on the small wing, and a little curve projecting beyond the outline of the breast indicates the presence of the other wing. The eye is depicted with a couple of strokes forming something that looks like an *epsilon*, more redolent of the eye of a sleeping bird. A leg is shown just ahead of the junction of body and tail, extending backwards as though the bird were moving forward; only the hock of the other leg is visible in front of this. Facing this smaller bird and seen in a slantwise view is the dark mass of a larger, rather ungainly bird executed in a thick application of ink as though with a brush, within a linear outline that can be seen in places (*Fig. 3,1b*); it has a plump body, and stands firm on substantial legs, with the curving shape of the thigh joint of the leg at the right distinguishable. Its wings are apparently outspread, the nearside one shown as a dark mass from which the tip is missing; some of the further wing appears above and behind what must be the head, the details of which are difficult to make out: it seems to be poking for-

¹⁰ Osborn - Osbornová, *Mammals*, 185-186.

¹¹ PSI VIII 919: *Tre vite*, 288-289, cat. 116.

¹² *P.Artemid.*, 473-482, esp. 473-475, 535-555 (R11-18).

¹³ 25 3B/58J(a) [ii], to be published in *The Oxyrhynchus Papyri* 83 (2017).

ward, and a lighter circular patch with a central dot might be its eye, followed by a beak-like outline. The rather spotted appearance of the body, suggestive of plumage, is more likely due to loss of ink in places; no tail feathers are shown. The pose and uniform dark coloration are reminiscent of depictions of eagles or similar raptors with spread wings, familiar in a variety of contexts including coin images, but the scale of such birds is different, the wing joints usually articulated, and the tail shown. The body shape of the bird here would be more typical of a goose or duck, but no feet are visible to clarify the identification¹⁴; it might even be seen as a cockerel similar in outline to the one described below, with the ‘wings’ on either side actually representing the tail feathers, and the head with comb and wattle as seen in profile. Finally, and most surprisingly, there is a unicorn facing left and slightly turned towards the viewer (*Fig. 3, 1c*): an elegant creature with a rather supercilious expression on its face. Its nearside eye is executed in a series of strokes that give a lidded appearance, and its long, straight horn is diagonally hatched and angled back from the domed forehead, between a pair of upright ears. At the base of its sinuous neck is a collar from which hangs a bell. Its back dips noticeably at the centre, and there are some light pen strokes across the body, but the outline of the belly has been partly lost in a break across the papyrus. A couple of short strokes halfway down the heavily outlined rump might be meant for a tail, or the tufted end of one, and the rear legs are slightly articulated, as though in movement.

On the other side of the papyrus, sketched across the fibres, are four creatures facing left: a cockerel in profile view (*Fig. 4, 2a*) with the comb, wattle, eye, and beak clearly shown on the head and the hackle feathers below, after which the body diminishes in size, with the tail feathers depicted in a wing-like shape arising from the lower back. Only a single leg is shown, perhaps in strict conformity to the profile view, with the hock the most clearly indicated element.



¹⁴ See the solitary bird (a puffin) with wings outspread amongst profile depictions in two ornithological manuscripts (Cod. Vindob. med. Gr. 1, fol. 480v, and Cod. Vat. Chis. 53, fol. 231v): Kádár, *Survivals of Greek Zoological Illuminations*, 79-83, pls. 126 a,b and 135, noting that the relevant text requires this extra depiction.

Andreas Schmidt-Colinet

THE RECONSTRUCTION AND DISTRIBUTION OF PATTERN BOOKS IN THE ROMAN EMPIRE

Some archaeological evidence from Palmyra

The sceptical article by Ph. Bruneau¹ caused a broad controversial discussion about existence, nature and appearance of 'pattern books' in antiquity. Even recently, P. Stewart denied completely the existence of such 'pattern books'², whereas M. Donderer proved again their existence with convincing arguments³. The discovery, exposition and scientific analysis of the Artemidoros Papyrus gave fresh impetus to the discussion⁴.

A close look to some archaeological evidence from Palmyra in Syria might bring some specific arguments for the reconstruction and distribution of such 'pattern books' at least within the Roman Empire⁵.

Looking at the temple of Bel⁶, constructed at the beginning of the 1st century AD, we realize a strange phenomenon: not only the ground plan of the temple is a copy of the Hellenistic temple of Artemis in Magnesia in Asia Minor, built by the famous architect Hermogenes

¹ Bruneau, «Mosaïstes».

² Stewart, *Statues*, 240: «No copy-books survive, however, nor is there any reference to them in surviving texts».

³ Donderer, «Und es gab sie»; Donderer, «Musterbücher».

⁴ For the Artemidoros Papyrus see Galazzi - Kramer, «Artemidor»; Galazzi - Settis, *Le tre vite*; Canfora, *Il papiro*.

⁵ For Palmyra in general see Colledge, *Palmyra*; Browning, *Palmyra*; Starcky - Gawlikowski, *Palmyre*; Schmidt-Colinet, *Palmyra*; Sartre-Fauriat - Sartre, *Palmyre*; Gawlikowski, *Palmyra*.

⁶ Seyrig - Amy - Will, *Le temple de Bél*; with the review by Gros, «Le temple».

around 200 BC, but also the ionic half-capitals at the external wall of the cella of the temple of Bel are exact copies of the capitals of that Hellenistic temple in Magnesia (Figs. 1-2)⁷. How did such exact patterns of a Hellenistic temple in Asia Minor reach Palmyra about 200 years later, if not by a 'pattern book'?

Working on the tomb n. 36 in Palmyra, built about 220-230 AD⁸, we detect similar phenomena within the architectural sculpture as well as within the architectural floral decoration of the building⁹. At the entrance façade of this tomb a Mermaid or Nereid can be recognized riding on a Triton: the squat knee of the lady, her fluttering hair and her left hand touching the neck of the Triton find their exact parallels only on attic sarcophagi from Athens (Figs. 3-4)¹⁰. At the same façade an Eros with an umbrella riding on a dolphin can be seen: an exact parallel to this very pattern exists only on a sarcophagus in the city of Rome, dating to the Antonine period, that is about two generations earlier than the example in the architectural decoration in Palmyra (Figs. 5-6)¹¹.



⁷ For the capitals from the temple of Artemis at Magnesia and their dating see Hoepfner, «Kapitell», 221-223, pl. 78.1.

⁸ Final publication: Schmidt-Colinet, *Tempelgrab*.

⁹ For the following cf. in general Schmidt-Colinet, *Tempelgrab*, 68-102, figs. 35-51; Schmidt-Colinet, «East and West»; Schmidt-Colinet, *Aspects*, 170-174; Schmidt-Colinet, «Musterbücher»; Schmidt-Colinet, *Palmyra*, 53-62.

¹⁰ Schmidt-Colinet, *Tempelgrab*, 91-92, note 270, pls. 20a-b, 67f; Linant de Bellefonds, *Sarcophages*, 108-109, 120, pl. 39.

¹¹ Schmidt-Colinet, *Tempelgrab*, 91-92, pls. 20d-e, 67d; Schmidt-Colinet, «East and West», 420, figs. 1-2; Schmidt-Colinet, *Aspects*, 171, figs. 10-11; Schmidt-Colinet, *Viaggi delle immagini*, 142-143, figs. 7-8; Schmidt-Colinet, «Musterbücher», 790-791, figs. 3-4; Schmidt-Colinet - al-As'ad, «Thirty Years», 311, figs. 2-3.

Annemarie Stauffer

ZUM GEBRAUCH VON MUSTERBLÄTTERN IN DER ANTIKEN TEXTILHERSTELLUNG *

1. PROLEGOMENA

Aus klimatischen Gründen ist nur ein verschwindend kleiner Teil antiker und frühmittelalterlicher Textilien überliefert. Unsere Kenntnisse orientieren sich also alleine an dem zufällig Erhaltenen. Aus diesem Grund erschließt sich uns die Kunst der Bildwirkerei vor allem durch die zahlreichen Funde aus ägyptischen Oasenstädten und ländlichen Siedlungen. Diese Funde sind qualitativ nicht gleichzusetzen mit den legendären Luxuserzeugnissen aus Babylon, Tyros, Antiochia oder Alexandria, um nur einige der Orte zu nennen, von denen in schriftlichen Berichten die Rede ist¹. Dennoch spiegeln das erhaltene Material und schriftliche Aufzeichnungen einen Aufschwung in der Produktion gemusterter Textilien in besagtem Zeitraum in allen Gebieten des Mittelmeerraumes. Damit einher geht eine sehr viel reichere Quellenlage was die schriftlichen Aufzeichnungen zu Herstellung und Handel mit Textilien und bildlichen Darstellungen von Geweben und Kleidung mit Musterung betrifft².

Es erstaunt deshalb nicht, dass aus dem 1. - 7. Jahrhundert aus Ägypten bemalte Papyri erhalten sind, die mit großer Sicherheit bei der Herstellung von Mustern als Vorlage gedient haben und zwar im wörtlichen

* Nachfolgender Aufsatz beruht auf meiner langjährigen Beschäftigung mit dem Thema Mustervorlagen und Musterbücher in der Textilherstellung, die 2008 in einer Monografie vorgestellt worden sind.

¹ Stauffer, «Nachleben»; Wipszycka, *Industrie textile*; Trilling, *Roman Heritage*, 31; Seyrig - Robert, «Sur un tissu».

² Zur Textilherstellung in Ägypten nach Auskunft der Papyri siehe die hervorragende Arbeit von Droß-Krüpe, *Wolle*.

Sinn, also nicht als Vorzeichnung oder Entwurf für ein auszuführendes Muster, sondern als Arbeitshilfe bei der Umsetzung eines Dekors in Technik der Bildwirkerei. Seit der Renaissance werden solche Vorlageblätter «Kartons» genannt. Nachfolgend sollen die wichtigsten Merkmale dieser Vorlagen erläutert und weiterführende Überlegungen zu ihrer Verwendung vorgestellt werden³.

2. MUSTERVORLAGEN FÜR WIRKER

Die Erzeugung von regelmäßig wiederholten Mustern in einem Gewebe erfordert ein großes Maß an technischem Know How und eine besondere Ausrüstung eines Webgerätes. Diese Technologien verbreiten sich erst seit der frühen Kaiserzeit im Bereich des Mittelmeerraumes. Davor behalf man sich bei der Mustererzeugung mit Sticken und Wirken, beides Techniken, die ein feinteiliges Arbeiten erlaubten. Beim Sticken wird das Muster auf einem bereits existierenden Grundgewebe ausgeführt, beim Wirken dagegen entsteht das Muster gleichzeitig mit der Herstellung des Grundes⁴. Korrekturen können nicht angebracht werden. Die Wirker bedienten sich deshalb von der Antike bis heute einer maßstabgetreuen Vorlage, die sie während des Webens hinter der Kette positionieren (*Abb. 1*)⁵. Aus dem römischen und frühbyzantinischen Ägypten sind solche Vorlagen in erstaunlicher Anzahl in europäischen Papyrussammlungen überliefert, die meisten von ihnen sind zur Anfertigung gemusterter Kleidung bestimmt (*Abb. 2-3*)⁶.

³ Stauffer, *Musterblätter*; davor schon Stauffer, «Cartoons». Zum Begriff Karton und zu einer möglichen griechischen Bezeichnung dafür Stauffer, *Musterblätter*, 14-16. Auf die Diskussion zur Existenz antiker Mustervorlagen allgemein wird an dieser Stelle nicht noch einmal eingegangen. Der Stand der Diskussion ist bei *P.Artemid.*, 582-586, sowie Donderer, «Und es gab sie doch» und «Musterbücher» zusammengefasst.

⁴ Zur Technik und den hierfür verwendeten Webgeräten und ihrer Ausrüstung immer noch grundlegend: De Jonghe, «Koptische weefsels»; De Jonghe - Tavernier, «Le phénomène de croisage».

⁵ Der Begriff *barbarikarios* meint nicht allgemein der Bildwirker, sondern der Wirker, der in persischer Tradition arbeitet. Immer noch falsch verstanden von Dietrich Willers in Willers - Niekamp, *Dionysosbehang*, 95.

⁶ Bestand und Provenienz der bekannten Kartons sind Stauffer, *Musterblätter*, 17-18 zu entnehmen.

Auf *Abb. 4* ist eine solche Vorlage aus dem Museo Egizio in Torino zu sehen⁷. Man erkennt trotz des fragmentarischen Zustands des Papyrus' die für Bekleidung seit der späten Kaiserzeit im ganzen römischen Reich verbreiteten Dekorationsformen: Rechts eine Tabula, links ein Clavus, welcher nach oben hin in ein horizontales Zierelement übergeht. Stellt man diese Formen auf dem Papyrus einer vollständigen Tunika gegenüber (*Abb. 5*), ist augenfällig, dass es sich hier nur um eine Vorlage für ein Textil handeln kann, aus anderen kunsthandwerklichen Bereichen sind solche Elemente nicht bekannt. Ebenso auffällig ist, dass die Position der Zierelemente zueinander auf dem Papyrus nicht jener auf der Tunika entspricht. Wir haben es hier mit zwei Modellen zu tun, die an beliebiger Stelle hinter der Kette positioniert und mit den Schussfäden nachgebildet werden konnten. Die auf engstem Raum materialsparend ausgeführten Bildelemente belegen in aller Deutlichkeit, dass die Vorlage während des Webprozesses beweglich blieb und beliebig verschoben wurde. Durch geschicktes Aneinanderfügen, Verschieben und bisweilen auch Drehen war es möglich, den Dekor zu erweitern und zu variieren. *Abb. 5* zeigt schematisch, wie mit Hilfe der beiden Einzelelemente auf *Abb. 4* der Dekor einer Tunika erzeugt werden konnte⁸.

Abb. 6 zeigt ein weiteres einschlägiges Beispiel, an dem sich exemplarisch ablesen lässt, wie mit der Vorlage gearbeitet wurde. Bei der Vorlage für einen Clavus⁹ erscheint das tropfenförmige Ende platzsparend neben dem geraden Teilstück; bei der Ausführung des Zierelementes wurden die beiden Teilstücke durch Verschieben des Kartons zu einem Ganzen zusammengefügt. Diese Beispiele, die sich durch das erhaltene Material beliebig erweitern ließen, sind auch deshalb so interessant, weil sie eindeutig belegen, dass die Maler der Musterblätter offensichtlich mit den Wirkern in Kontakt standen und nicht nur die Anforderungen an die Vorlagen kannten, sondern konkret mit der Arbeitspraxis der Wirker vertraut waren.

Die Vertrautheit der Kartonmaler mit der Funktion der Vorlage lässt sich auch an der Art der Ausführung ablesen. Zweck des Kartons

⁷ Torino, Museo Egizio, inv. suppl. 2200bis (1), aus Hermopolis Magna. Cf. Stauffer, *Musterblätter*, Kat. 36.

⁸ Bei einem vertikalen Webgerät, bei dem die Kette senkrecht verlief, konnte die Vorlage sogar von zwei Seiten hinter die Kette gelegt und damit die spiegelbildliche Darstellung realisiert werden.

⁹ Torino, Museo Egizio, inv. suppl. 2200bis (6), aus Hermopolis Magna. Cf. Stauffer, *Musterblätter*, Kat. 24.

war, dem Wirker eine Arbeitshilfe an die Hand zu geben, die dazu diente, eine Dekorationsform und ihre Inhalte exakt und formvollendet auf einem noch nicht existierenden Grund auszuführen und – der römischen Dekorationssyntax entsprechend – diese Form auch mehrmals in unverändertem Maßstab auf dem gleichen Objekt wiederholen zu können. Aus diesem Grund weisen alle erhaltenen Wirkmuster klar definierte und gut erkennbare Umrisslinien auf. Bei einigen Musterblättern sind die Konturen zur Erhöhung der Lesbarkeit mehrmals nachgezogen oder mit einer weißen Randlinie verdeutlicht, bei anderen schwarz und rot ausgeführt¹⁰. Auf die klare Lesbarkeit der Vorlage ist auch die stets flächig malerische Ausführung zurückzuführen (*Abb. 7a*). Wirken heißt stets arbeiten mit unterschiedlich farbigen Flächen, einzelne Linien dagegen werden möglichst vermieden. Die flächige Malweise bei allen Vorlagen unterscheidet den Karton deshalb von anderen Hilfsmitteln wie Werkskizzen, Plänen und ähnlichem (*Abb. 7b*).

Zu den unverwechselbaren Charakteristika der Wirkvorlagen zählen ferner die nur andeutungsweise ausgeführten Randabschlüsse an den umlaufenden Konturlinien einzelner Zierelemente. *Abb. 8* zeigt einen Ausschnitt aus dem bereits mehrfach publizierten Papyrus im Besitz des Victoria and Albert Museums¹¹. Am oberen Rand der Tabula ist andeutungsweise ein Abschluss in Form einer Kleeblattreihe gemalt; das Muster ist nur an dieser Stelle und nicht vollständig ausgeführt. Genau gleich werden beim senkrechten Clavus an der rechten Seite ein laufender Hund und wiederum eine Kleeblattleiste angedeutet, der linke Randabschluss endet als gerade Linie. Solche nur punktuell angedeuteten Randverzierungen sind an weiteren Mustervorlagen nachzuweisen und bilden wiederum ein unverkennbares Kennzeichen der Wirkkartons. Es blieb offensichtlich den Wirkern überlassen, ob und welche Randlösung sie anwenden wollten. Die einfachen Muster gehörten zum handwerklichen Repertoire und wurden bestimmt während der Ausbildung erlernt¹². Alle Randabschlüsse, die auf den überlieferten Musterblättern vorkommen, sind auf den gewebten Beispielen wiederzufinden¹³.



¹⁰ Cf. Stauffer, *Musterblätter*, 24.

¹¹ London, Victoria and Albert Museum, inv. T15-1946. Stauffer *Musterblätter*, Kat. 13.

¹² Dross-Krüpe, *Wolle*, 103-120.

¹³ Eine Zusammenstellung von Zeichnung und Original bei Stauffer, *Musterblätter*, 33.

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Figs. 2, 3, 4. Moreno, «Capriccio», 116, figs. 237, 238, 239

Figs. 5, 6. Calvesi, «Artemidoro», 120, 121

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Fig. 8. Canfora, *Papiro*, fig. 9a, 9b

Fig. 9. Janko, «Review», 408, pl. 3

Fig. 10. © Athens, Gennadius Library

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Figs. 1-27. Per gentile concessione Compagnia di San Paolo; *Il Papiro di Artemidoro (P.Artemid.)*, edito da C. Gallazzi, B. Kramer, S. Settis. Milano, LED Edizioni, 2008

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WHITEHOUSE

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SCHMIDT-COLINET

Figs. 1, 3, 5, 7, 8a, 11, 12, 13, 14, 15a, 16, 17a, 18, 19. Photo: Author

Fig. 2. Hoefner, «Kapitell», Taf. 78.1

Fig. 4. Photo: P. Linant de Bellefonds

Fig. 6. D-DAI-Rome Inst. Neg. 54.432

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Fig. 10. Schmidt-Colinet, *Palmyra*, 54, Abb. 80

Fig. 15b. Stauffer, *Kleider*, 71, Abb. 110

Fig. 17b. Stauffer, *Kleider*, 71, Abb. 111

Fig. 20. Schmidt-Colinet, *Palmyra*, 60, Abb. 94

STAUFFER

Abb. 1-7a, 8-12. Stauffer, *Musterbücher*

Abb. 7b. Per gentile concessione Compagnia di San Paolo; *Il Papiro di Artemidoro (P.Artemid.)*, edito da C. Gallazzi, B. Kramer, S. Settis. Milano, LED Edizioni, 2008

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Immagini riprese all'infrarosso. Per gentile concessione Compagnia di San Paolo; *P.Artemid.* (LED Edizioni 2008). Tavole XVII, XXVIIIa, XXVIIIb, XXX, XXXII, XXXIII, XXXIV, XXXV, XXXVI, XXXVII, XXXVIII, XXXIX, XL.