

Intorno al Papiro di Artemidoro

III. I disegni

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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 Aristotele 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 *kukliskos* (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 (οὐπὼ 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 εὐσκιοί), and to do them accurately is not particularly skillful (οὐπὼ 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' (σκιὰ, 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.

Here it is precisely the kind of treatment that gives vividness to figures in motion and entanglement, like the animals in conflict on the papyrus or the ones shown turning, that Philostratus values in the pictorial arts. We may assume that he is performing in a mock-art-historical manner in this passage²⁴, replicating the kinds of technical praise and language used of painting in his time²⁵.

2. BACKGROUNDS

Where the envisaging of volume differs between *recto* and *verso* is less in the question of how to render a three-dimensional object illusionistically on a two-dimensional surface than in the choice to render its placement in space. Only the images of feet in the *recto* (R3; R6; R8, *Fig. 20*; R13, *Fig. 21*; R15 and R17, *Fig. 22*) give even a hint that the voluminous body-part being depicted is actually situated in a spatial setting. In fact, R17 gives no space or grounding for its sandal-wearing foot (*Fig. 22*), but in the other cases there is just a sketched hint of a floor to rest on. That is, in general the body-part images of the *recto* are concerned with a naturalistic rendering of volume, shape and gesture but hardly at all with this being set in an illusion of space. Here the *verso* is quite different.

All the animals, birds and fish of the *verso* are presented with landscape markings or lines to indicate water as well as sometimes marks to indicate shadows or indentations where their feet contact the ground. In each case, this represents a deliberate attempt to mark the beast's presence in an illusion of real space. So, to return to the *kriagron* (V4, *Fig. 6*), for example, the lines immediately below the animal's feet mark its presence as actually standing on the ground, perhaps as shadows, while the squiggles in a rough oval around its legs give the sense of a spatial setting, with the upright strokes below the forelegs implying a grassy plain or steppe and the slanted diagonals beneath the *kriagron*'s belly (but implying space far beyond) offering a certain ambiguity as to whether the implication is a relatively constricted space or a wide and open grass-

²⁴ The use of the word ἄρρωται (literally, 'they are strong or vigorous') of the way the shadows of Heracles are drawn is a joke on the traditional manly vigour of Heracles, and indicates quite a bit of playful self-consciousness about the passage.

²⁵ Cf. II 32, 4 where the skill of the painter is specifically praised for making a seated figure «because there are most shadows on seated figures».

land. A similar treatment of ground-contact and wider spatial setting is observable in the *otos chersydros* (V24) and the *astrokyon* (V29, Fig. 14), although the survival of the landscape backgrounds to these images is much worse than that of the *kriagron*. This dual strategy for grounding the animal on the earth and contextualizing its setting is apparent again in the case of the *myxos* (V28, Fig. 19) and the wild goat (V38, Fig. 11), where in both cases the depiction of the grassy oval is more developed as a defined landscape background – with the grassy tufts contrasting with bulgy curves in the *myxos*, perhaps to indicate a marshy context, while the sketch to the left of the lynx and goat group seems to imply the hint of a large boulder with grass clinging to the rock. In one case (V36, Fig. 23) the animal hardly survives, nor its name, but the ground is impressive in its evocative extent, the range of drawn markings and the apparent placement on a relatively thickly drawn ground line of what looks like the surviving foot of the creature once depicted here.

Some animals have almost no background but do show the shadowy imprint of feet on the earth – although in the case of the giraffe (V21, Fig. 15) one wonders if the contrast of a lack of setting beside the landscapes of the other animals and vignettes is not itself a deliberate evocation of the desert. Another case with just the slightest hint of ground is the fight of the elephant and the serpent (V16, Fig. 24), where there are lines to indicate the contact of the elephant's left foreleg with the earth. Again a desert setting is not impossible. The river and sea creatures, by contrast, offer horizontal lines that indicate a watery setting – for instance, the *lagoos* (V5), the sword fish and tuna (V9), the *prion* (V10), the *hierax* (V11, Fig. 13), the *kyksliskos* (V15, Fig. 7), the *tauros* fish (V17, Fig. 25), the *ouranoskopos* (V20), the *sauros* (V39), the *physalos* (V40). Some birds too appear among a set of horizontal lines implying water – for example, the *aigilops* (V12, Fig. 18), the *ostakeus* (V26), the *keratinos* (V27). In the case of these birds, the lines indicating water imagery imply a ground in which the bird dwells (the equivalent of the ovals of grass and rocks for the land creatures). In the case of the fish, the lines indicate the watery medium which the animal inhabits, just as the absence of background or drawing around the upper part of the land animals and birds may be said to indicate air.

We may say that in each case, this grounding of the creature within a landscape is a form of naturalistic representation stressing presence in real space that has been illusionistically depicted. But it is of course a set of conventions, schematized through sketching, perhaps borrowed from the model before the draughtsman, certainly copy-able if the papy-

rus were intended as, or at some stage later used as, a model-book. At the same time the variety of grounds – not great in itself but sufficiently diverse to give a sense of grassy, rocky, marshy and watery terrain as well as sea and river habitats (and perhaps desert), not to speak of water as a medium in which an animal may dwell – offers a paradoxography of differentiated natural habitats as well as a bestiary of animals that occupy them. That is, the swiftly sketched backgrounds and landscapes of the *verso* offer a flora to complement the fauna of its animal pictures. There is an interesting way in which this may be said to complement the map on the *recto*, which gives a topography without its landscape and wildlife, and whose vignettes focus on man-made monuments – indications of urbanism and roads. While the map charts human interventions in a landscape, the *verso* is entirely natural in its emphasis – offering animals (real and fantastic) and a sense of landscape but not trees, bushes or larger natural features. Does the *verso* effectively supplement the map by filling its world with flora and fauna? Does the *verso* symbolically allude to the difficulties of the human world, which the map elides, by offering so many images of conflict (admittedly always of animals in conflict) ²⁶?

The papyrus' strategy of landscape setting is significantly more developed and advanced when we come to the vignettes that include more than one animal, usually fighting. Most impressive is the great scene of the griffin and the leopard (V19, Fig. 26), which occupies the entire height of the roll and so has more scope than the other images to develop a pictorial exposition. It may be said that if this scene alone had survived, scholarship would surely have been besotted with a masterpiece of ancient drawing, the cartoon for some imaginary and major painting. In this vignette we are offered not only a wide extent of ground – setting the scene in an open space with both grass and rocks – but also the clear intimation of height with the griffin soaring high above the ground carrying the leopard cub and the leopard parent below. The effect is very successfully evoked, largely because the foreshortened wings of the griffin give the impression of being in flight high and above the leopard, by contrast say with the way the wings of the *myrmex* (V22, Fig. 16) are rendered in an animal whose feet are firmly placed on the ground. Other scenes also give a sense of extensive landscape – notably the battle of the panther

²⁶ For tentative remarks about the geographic/paradoxographic coherence of text, map and verso drawings, see D'Alessio, «On the Artemidorus», 42, and Elsner, «P.Artemid.», esp. 50.

and the serpent (V25, *Fig. 27*) and the tiger in conflict with a now lost adversary (V31, *Fig. 31*) – although the small fragment which the editors restore in contiguity with the tiger need not certainly have been so close to it and might have been part of an entirely different animal scene, although it must have been somewhere not too far since its obverse shows a section of the map, as does the obverse of the tiger. Further vignettes give what might be thought the opposite sense of a secluded and more confined space – for example, the battle of the lynx and the wild goat (V38, *Fig. 11*).

But all of these, and indeed the drawings of the animals in general, visualize their subjects as if observed unawares from ground level, some distance off but with a close-in focus as from a telephoto lens, almost always in profile, rather like the style of modern nature documentaries on television and their dependence on the hidden camera. By contrast, the scene where the griffin steals the leopard cub is significantly more pictorial and sophisticated in its spatial implications because it evokes space both as extent and as height, as well as giving the landscape significant definition. It too imagines the viewer as roughly on ground-level, like the leopard, and at a distance, but then has the griffin soaring above both leopard and viewer, in a way that includes the spectator in the image and keeps the illusion consistent. This low viewing-point – which (without having had a chance to chase a plethora of comparanda) seems to me much lower than in Greco-Roman chorographic imagery like the Nile mosaic from Palestrina²⁷, which is from a higher vantage point so as to take in a larger view – hugely contributes to the pictorial drama of the scene by making it not simply descriptive (of a beast robbed of its young) but vividly evocative of the action through its implicit inclusion of the viewer as looking up at the flying griffin.

We may generalize and say that each animal, bird or fish is placed in a sketched but appropriate immediate background. Only in the case of the griffin and leopard vignette does this rise beyond a setting to suggest the illusion of height as well as space, building a dramatic immediacy of spectator involvement into the action. However, if we take the roll as a whole, there is no attempt at systematicity or a consistent pictorial logic in how the different creatures are placed. True, all are drawn to be seen with the papyrus placed one way up – the same way up on *recto* and

²⁷ See Meyboom, *Nile Mosaic*, 101, 104, 182-185 on the bird's-eye view and high vantage point of the Palestrina mosaic, and 186-190 on the genre in general.

verso – none are upside down or at right angles to the others. The majority, also, are represented in a right to left direction, although here there are several exceptions – so one cannot suppose any kind of directional logic on the *verso*. Most striking is the fact that while many of the sea animals are located at the bottom of the roll with land animals above them, this is not systematic. For instance, the elephant and serpent (V16, Fig. 24) – whose battle certainly takes place on land – stand above two fish swimming towards the left, the *kykliskos* (V15, Fig. 7) and the *tauros* (V17, Fig. 25). But just to the left of these, the fight of the sword fish and the tuna (V9) – certainly a sea battle – is at the same height on the roll as that of the elephant and the serpent, again with fish demurely swimming leftwards beneath, this time the *prion* (V10) and the *bierax* (V11) and with birds on high (V7, V8, V12, V13 and V14). But just to the left of these, and squarely demolishing any hope of seeing a systematic spatial organization on the *verso* that might have imagined a consistent placing of sea and land, the *kriagron* (V4, Fig. 6), a sheep-like mammal, stands above a fish, the *lagoos* (V5) swimming in the sea, which is itself above the *kastor* (V6), a kind of wild cat perhaps, which is certainly prowling on land.

In other words, while each animal or vignette appears in illusionistic space when taken alone, there is no attempt to create a fantasy of collective or consistent space in which the animals might be imagined to appear together – as is the case in the ancient comparanda that have been commonly adduced for the *verso*, such as the Nile mosaic from Palestrina, the various marine and animal mosaics from Campania and Rome, or the animal fresco from the peristyle of the house of Romulus and Remus in Pompeii (VII 7, 10)²⁸. Despite its thematic co-ordination as a bestiary of real and imagined animals (all of them surely drawn from other pictorial models rather than from life), there is no pictorial co-ordination of the images on the *verso* of the papyrus into any kind of consistently visualized zoological paradoxography or any kind of comprehensive landscape with

²⁸ Comparanda: *Tre vite*, 111-116 (G. Adornato); *P.Artemid.*, 311-326. Meyboom, *Nile Mosaic*, 177-180, suggests just such a papyrus scroll as the potential pattern-book for the Palestrina mosaic (this before *P.Artemid.* was known). For Palestrina, see Meyboom, *Nile Mosaic*, 3-7, 20-41, 96-107, and briefly Dunbabin, *Mosaics*, 49-52. For the fish mosaics (from Pompeii VI 12, 2; VII 4, 31; VII 6, 38; VIII 2, 16), see Blake, «The Pavements», esp. 138-139; Pernice, *Pavimente*, 149-154; Meyboom, «Mosaici pompeiani». For the House of Romulus and Remus, see *PPM* 7, 258-276, esp. 265-270.

animals²⁹. If the *verso* was intended as a copybook for the making of such objects as the Palestrina mosaic, then it was for the specific modeling of individual animals or vignettes and not in any sense for their combination, orchestration or relationship within a plausibly visualized topographic setting. This makes the *verso* very different from the evidence offered by mosaics and paintings of animals, but of course it is a very different kind of object and a unique one. On the other hand, the kind of logic that mixes items or specimens with a loose thematic connection but no particular formal or systematic organization across a visual field is not unknown in antiquity – for instance in unswept floor mosaics³⁰.

3. GRAPHIC VARIETY

P.Artemid. gives evidence of 3 very different strategies of graphic representation. The map on the *recto* is an abstract image of a large space rendered symbolically as a topographic summary with some man-made features³¹. The *recto* drawings are not hugely successful practice sketches of body parts (perhaps from three dimensional objects like casts, perhaps from other sketches) and their aim is to render volume and shape in a naturalistic idiom, but not the siting of such volume and shape in space. The *verso* drawings, much more successful as works of draughtsmanship, attempt to render the mass and solidity of animals, on the one hand, and to place them in an illusion of real space, on the other. In the case of the exceptional griffin and leopard vignette that attention to space extends not only to setting but also to height and includes a sensitivity to and

²⁹ Here we may see parallels with the animal frieze from a tomb in Marisa in Palestine, dated to the third century BC, as suggested by *P.Artemid.*, 311. This is executed in black and red on a white ground rather less illusionistically than *P.Artemid.*, but with some use of shadowing (for instance on inside legs). The animals – captioned in Greek and including land and sea creatures as well as fantastic beasts – are hardly connected except sequentially. There are some trees, but no illusionism of landscape as setting. The basic model of a monumental painted frieze is of course quite different from whatever the *verso* of *P.Artemid.* was intended to be. For discussion, see Jacobson, *Hellenistic Paintings*, 22-36, 39-50.

³⁰ On the unswept floor genre, associated with a mosaicist called Sosus (Pliny *Nat. Hist.* 36, 184), see e.g. Meyer, «Zu neueren Deutungen»; Hagenow, «Der nichtausgekehrte Spiesesaal».

³¹ For the map, apart from the major discussion in *P.Artemid.*, 273-308, see Talbert, «*P.Artemid.*» and the essays collected in *P.Artemid.* 2.

awareness of the spectator's imagined view-point (which I judge to be lower than is often the case in Greco-Roman art, and deliberately empathetically integrated into the dramatic world of the image). In addition all the animals of the *verso* have labels. Further, and of some importance, the *verso* appears to have been supplied with an overall label or caption³², published as V30 in the *editio princeps*, which is located just to the left of V32 and above V31³³. This implies that – whatever view the papyrus' owners or makers held of the *recto*, they (or someone in antiquity) considered the *verso* sufficiently finished and complete to merit a descriptive title – one that in fact summarizes its contents correctly. The caption reads (according to the restoration of the *editio princeps*):

ζῳα] τὸν ὠκεανὸν
οἰκοῦν]τα καὶ πτηνὰ
κα[ἰ περὶ] τὰ [κα]ὶ κήτη

«Living beings who dwell in the ocean: flying beasts and walking beasts and beasts of the sea»³⁴.

This sense of completeness is interesting in light of the lack of consistency or coherence in the conjunction of the individual elements of the *verso* as a single landscape: obviously the idea of a single or unified landscape as found in the Palestrina mosaic was not necessary. If the roll had the order suggested by Nisbet and D'Alessio³⁵, either originally, or at a later stage but before the addition of the *verso* images³⁶, then the caption appears near the end of the roll, which may give it a certain significance.

³² Pajón Leyra, «La didascalia general», and Pajón Leyra, «Artemidorus», 340-345.

³³ P.Artemid., 425-426.

³⁴ Pajón Leyra, «La didascalia general» restores the beginning as παρὰ] τὸν ὠκεανὸν, removing the apparent duplication of sea creatures and giving the caption a specifically local implication; the meaning in this case is «the flying, walking and sea beasts who live by the ocean». Pajón Leyra, «Artemidorus», 342-343, nn. 172-173, tries:

τὰ παρὰ] τὸν ὠκεανὸν
οἰκοῦντα περὶ] τὰ καὶ πτηνὰ
κα[ἰ ἐν αὐτοῖς] κήτη

meaning «the (?) walking animals and birds which [live near] the ocean and the (?) monsters [which live in it]».

³⁵ D'Alessio, «On the Artemidorus», and Nisbet, «P.Artemid.».

³⁶ As suggested at the Florence conference by Claudio Gallazzi. See Gallazzi - Kramer, «Fünfzehn Monate Diskussion», 216-220.

Clearly no part of *P.Artemid.* was a pattern book of the kind discussed by Annemarie Stauffer³⁷. That is, none of its elements could be functionally detached and easily used for making a copy directly. That said, there is an interesting coloured papyrus fragment in Berlin (*P.Berol.* 5004), which preserves a hunting scene of an image of a fight between a gladiator and a leopard or lioness rearing on its hind legs³⁸. This could indeed be from a pattern-sheet (*Wirkkarton*) of some kind and the rearing animal may be said to resemble both the tiger (V31) and the *myrmex* (V22), if one removed the latter's wings and horns. The Berlin beast faces left, however, while the two *verso* animals from *P.Artemid.* face right. If indeed the Berlin 'lioness', the *myrmex* and the tiger are all basically replicative types of a large wild cat raised on its hind legs in battle, then their variety is itself fascinating for the ways patterns could be used. The basic creature has a given posture, but this may be reversed, the assailant may be changed (to include all kinds of animals and men) with resulting differences in narrative effects (hunting, gladiatorial combat, clashes between beasts in the wild etc.), the creatures may be varied by the addition of attributes (like spots or stripes and so forth as appropriate for leopard, tiger, panther and lioness, or the wings and horns of the *myrmex*), the setting may be differentiated by the kinds of grassland around the creature (as between the *myrmex* and the tiger), and of course colour may be applied as in the Berlin example. None of this makes *P.Artemid.* certainly a pattern book, but it does increase its chances of having been made from one. Clearly the *verso* is the closest artifact surviving from antiquity that resembles the kind of sketch-book that preserved patterns and models, which we know from the Middle Ages and later³⁹.

It seems to me that the papyrus' three kinds of drawings need to be seen in the wider context of the practical and imaginary world of artists' workshops and training. Different skills are being asked of the people who made the three kinds of drawings, and they are accomplished with different levels of competence. It is not inconceivable that the *recto* images (whose interest is entirely in shape and volume but not at all in space) are by draughtsmen imagining *sculptural* illusionism, while those on the *verso* are *pictorial*, and hence care about the illusion of space. It is

³⁷ Stauffer, *Antike Musterblätter*; Schmidt-Colinet, «Musterbücher», 787-792.

³⁸ For discussion and illustration, Paribeni, «Frammenti», esp. 199-201, and Stauffer, *Antike Musterblätter*, 29.

³⁹ As discussed by e.g. *Tre vite*, 20-24, 28-35; *P.Artemid.*, 320-322; Elsner, «P.Artemid.», 38-46.

not impossible that the *verso* is a series of practice drawings from a set of smaller and more portable copy-books⁴⁰. In this case, the draughtsmen of the *verso* may either have included the spatial and landscape settings found in the model or may have added settings to the model animals precisely in order to master the complexities of spatial illusionism and the impression of different landscapes that can be made with relatively simple graphic means. Certainly, the lack of understanding of the relative size of the animals in the Nile mosaic of the House of the Faun is easily comprehensible if we imagine an artist working from a model book whose drawings are something like those of the *verso* of *P.Artemid.*, but all of about the same size and with the artist having no personal experience of the animals concerned⁴¹.

In any case, what is clear is that in their radically different ways, all the images – map, *recto* and *verso* drawings – do attempt to visualize three dimensional volume and space. This is perhaps a real space in the case of the map (although that too could be a practice map made by a trainee and envisaging an imaginary topography) but it is certainly illusionistic volume and space in the case of the drawings. That graphic imaginaire which moves from the two dimensional monochrome of the chosen medium in all the images of the Artemidorus Papyrus to the suggestion of three dimensional illusionism and the play of light and shadow (if not of colour) in the finished drawings is quite exceptional in this object. It belongs to a radically different idiom (Hellenistic naturalism) from the squared grid images in Pharaonic style. And yet, as Helen Whitehouse points out in her discussion of the frontal cobra on the Oxyrhynchus crown, these Pharaonic drawings too were designed to help artists create three dimensional statues as well as reliefs.

The 'graphic space', offered by a sketchbook like what *P.Artemid.* ultimately became, is extremely interesting evidence for different forms of artistic experimentation within antiquity. We are offered different ways of rendering different kinds of three-dimensional experience on the flat surface – volumetric, spatial, topographic. These are potentially evidence of different ways (or kinds) of learning and of different targets for representation with different purposes. The issue is not whether this kind of thing happened in artists' workshops in antiquity (if genuine, *P.Artemid.*

⁴⁰ On the model of what Stauffer identifies as 'Wirkkartons' or pattern sheets that survive in papyrus and were used for the making of Coptic textiles.

⁴¹ This point was made by Helen Whitehouse in discussion at the Uffizi Conference.

is conclusive proof that it did) but how much of this kind of ‘play’ infused both the practice and the training of the people who produced the kinds of statuary, mosaics and paintings of which we have such large quantities from across the ancient world. One specific question is whether the texts of the *recto* belong to the same workshop or generative context as the images – especially in relation to the captioning of the images of the *verso*, which may imply either a literate artist or an artist working closely with a scribe. The rich evidence, across both Greek and Roman artistic practice, for artists’ signatures suggests some level of literacy in the profession⁴², and we may speculate that the range of evidence on *P.Artemid.* implies – at least in the context of one workshop or book-making and illustrating scriptorium in Egypt – that an expectation of literacy may not have been unusual in professional artists and trainee artists.

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⁴² The classic account for Greek artists is Loewy, *Inscripfen*, supplemented by Marcadé, *Recueil*. For Roman artists, see Toynbee, *Some Notes*, and Thomas, «ΜΝΗΣΘΗ Ο ΑΓΟΡΑΖΩΝ».

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Fig. 1. – R12.



Fig. 2. – R13.



Fig. 3. – R1.



Fig. 4. – R23.

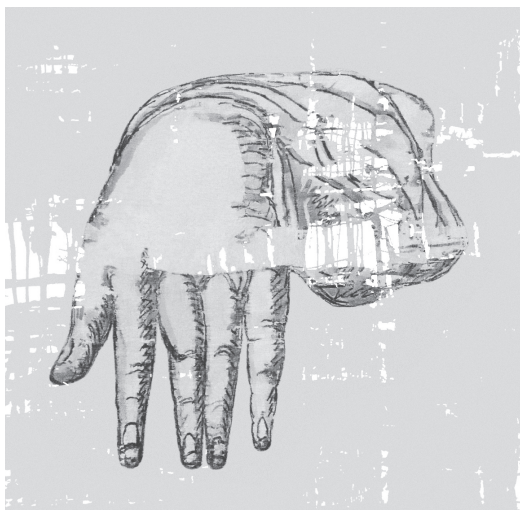


Fig. 5. – R10.



Fig. 6. – V4.



Fig. 7. – V15.



Fig. 8. – R2.



Fig. 9. – R21.



Fig. 10. – V8.



Fig. 11. – V38.

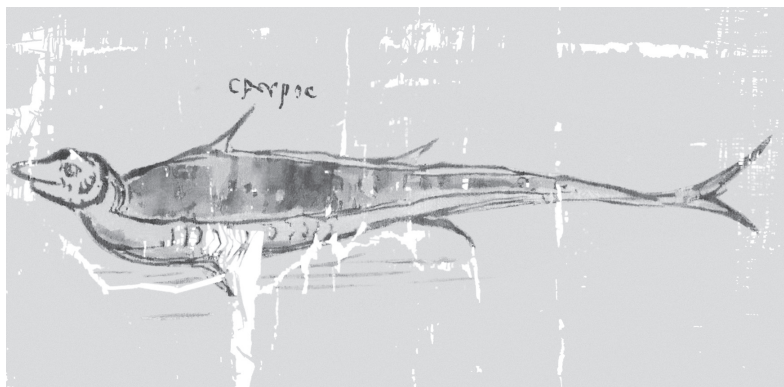


Fig. 12. – V39.

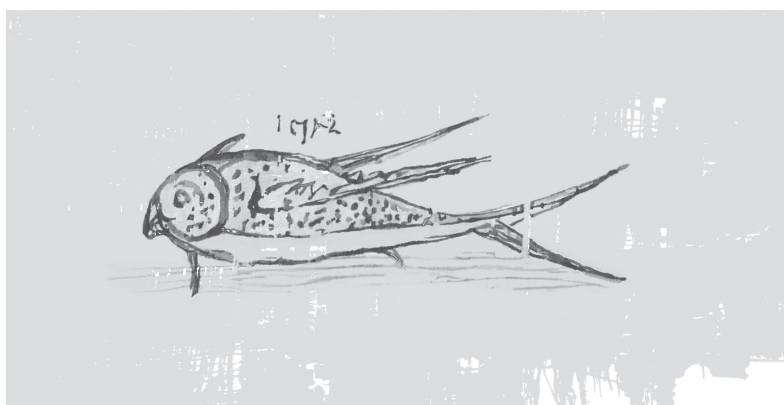


Fig. 13. – V11.



Fig. 14. – V29.



Fig. 15. – V21.

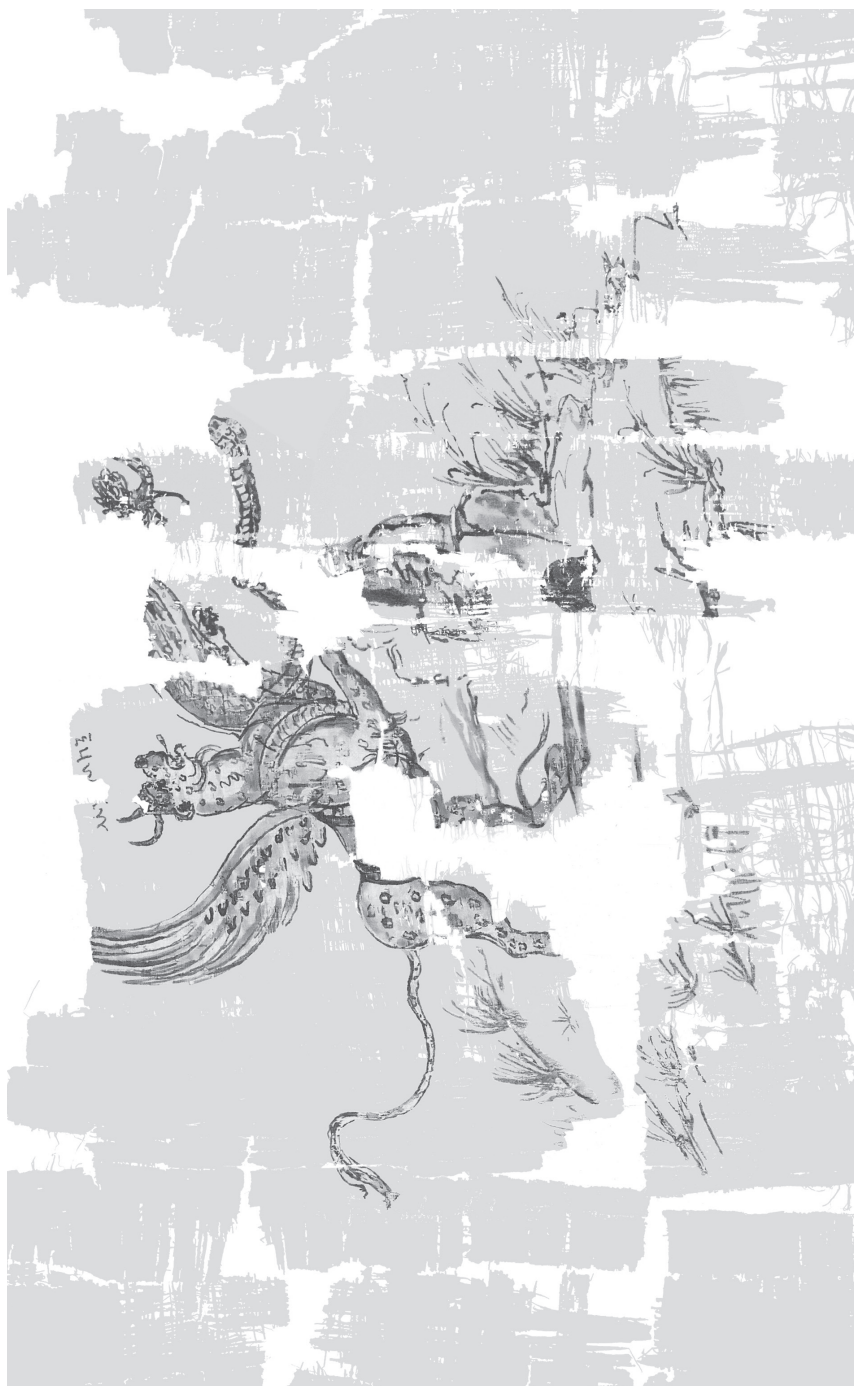


Fig. 16. – V22.



Fig. 17. – V31.

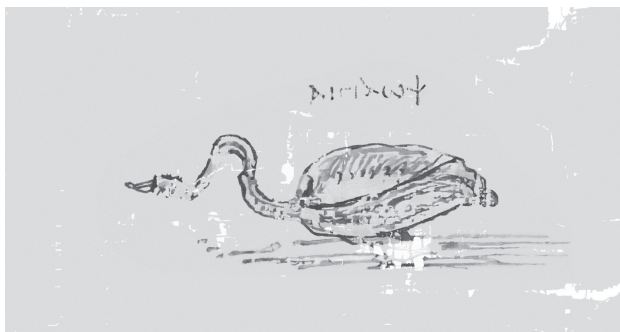


Fig. 18. – V12.



Fig. 19. – V28.

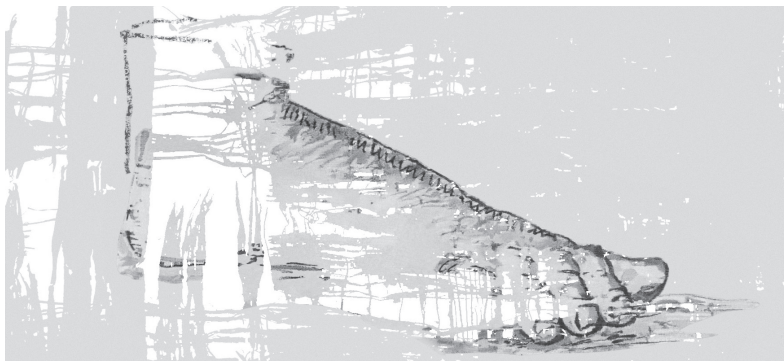


Fig. 20. – R8.



Fig. 21. – R13.

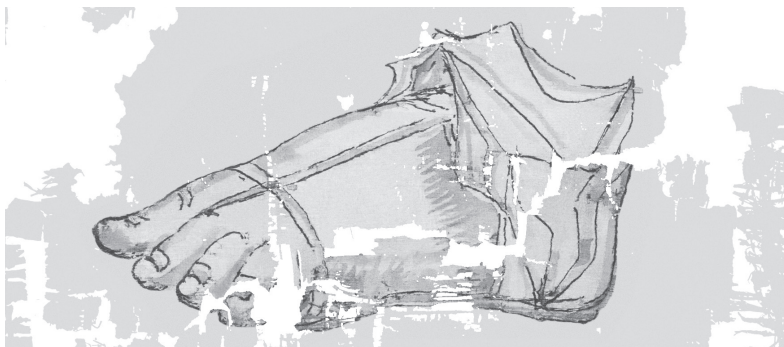


Fig. 22. – R17.



Fig. 23. – V36.



Fig. 24. – V16.

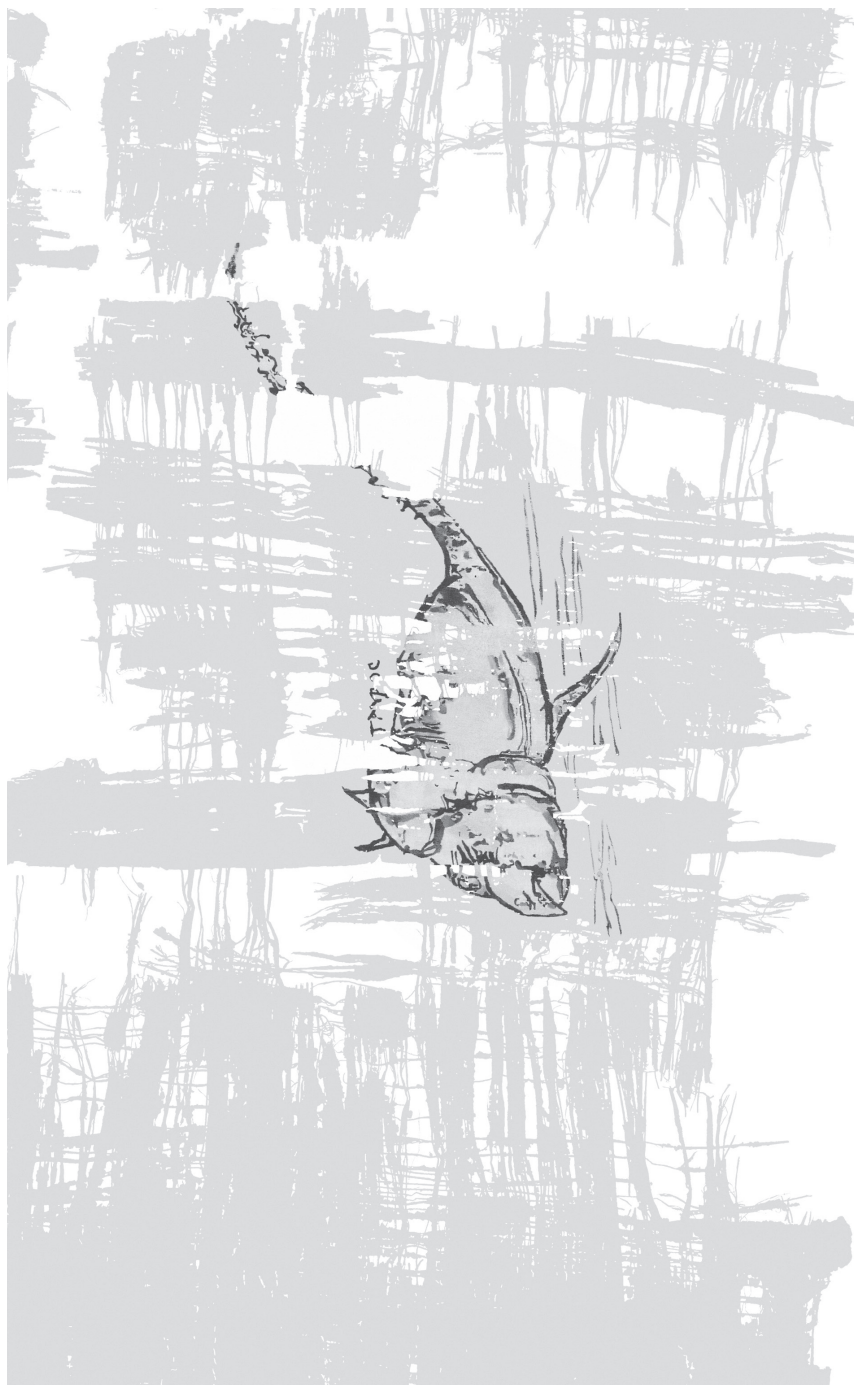


Fig. 25. – V17.



Fig. 26. – V19.



Fig. 27. – V25.

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