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## TO THE METHOD OF DESCRIBING ILLUMINATED ARABIC MANUSCRIPTS\*

The publication of two fine catalogues — by F. Déroche [1] and by G. Schoeler [2] — marks the beginning of a new stage in descriptive arabistic archaeography, the development of a new branch of this discipline, practically non-existent before but prepared, sometimes consciously, sometimes by intuition, by several publications appearing during the last decades. We bear in mind the shift of archaeographic interests from texts represented by some particular copies to manuscripts as they are, which means a basic renewal of the object described in catalogues of Arabic manuscripts.

A period of some confuse of the genre [3] producing a series of catalogues with too simplified descriptive schemes [4] which preceded the birth of this new tendency was followed by the appearance of descriptive works marked with certain innovations [5]. This tendency is most clearly revealed in the catalogues by F. Déroche and G. Schoeler. Due to the specific interests of their authors and, to some extent — to a great number of codicologically significant photographic illustrations supplementing the descriptive part, these catalogues became really significant as publications of objects of material and artistic culture [6]. Without these photographic supplements the catalogues would have lost much not only in volume but first of all in their scientific and methodological significance.

Among the practical results of the appearance of catalogues, where much space is dedicated to the description of decorative elements present in manuscripts, was the understanding (which came, partly, due to their appearance) of how little has been done so far by arabistic archaeography in the field of describing illuminated manuscripts [7].

In view of this current re-orientation of archaeography it is time to admit, that among the reasons for archaeographers' insufficient activity there were difficulties arising in the process of making a verbal description of decorative elements. There are no Arabic terms (or, at least, such have not been revealed so far), and the current European terminology is not well adapted to describe the realities of Islamic manuscript-art. The available classification of decorative elements is unstable and is not international [8]. The authors of catalogues encounter much more difficulties in this field than those art-historians who, judging by their works, have something to do with the object of our investigation. This is confirmed once more by the catalogues by F. Déroche and G. Schoeler: answering

the natural demand of scholarly audience for new knowledge, they could not or were not willing to ignore the presence of decorative elements in Arabic manuscripts, even if they are using the language of art history rather than of descriptive archaeography to define them. For this reason it would have been difficult to imagine, if not for the photographs illustrating the catalogues, what could these "verbal portraits" of decorative elements mean. But illustrations are expensive, often it is not possible to produce them because of various technical difficulties. The result is, that investigators, who usually follow the steps of cataloguemakers, are denied the possibility to search for and select their materials from catalogues. We must admit, that by the present time the decorations of Arabic manuscripts as a specific branch of applied art have been studied and described rather superficially and, moreover, selectively. It means that materials required for a full-scale study of this branch of art by art-historians are not quite prepared for them by arabists-archaeographers. A variant of such preliminary study is submitted here to the attention of the

The Berlin manuscript [9], which interested me with its frontispiece, had been already, at least three times, considered by specialists. For the first time — because of its binding. Then M. Weisweiler included its brief and specific description into his monograph on medieval Islamic bindings [10]. Then it was exhibited, and its description appeared in the exhibition catalogue, in the chapter on book-decorations (Ornamentaler Buchschmuck) [11]. Finally, its full description was included into the catalogue of Arabic manuscripts by G. Schoeler mentioned above [12]. There it attracted my attention, partly because of the character of its illuminated pages [13], but, first of all — by the reproduction of its title page or, better to say, its frontispiece (fig. 1).

The main part of this frontispiece represents a figure which often occurs among decorations of Arabic manuscripts — "a square between two rectangles" (my definition). Its three components are bound together with one rectangular frame. On the left, on the outer side of the frame, it is adjoined by two circular medallions arranged on the horizontal axes of the two rectangles and by a semicircular medallion on the horizontal axis of the square. Each of the rectangles contains a cartouche with text (the title of the book). A large octofoil is set in the center of the

<sup>\*</sup> First publication in Russian in: St. Petersburg Journal of Oriental Studies, 3, 1993. Publication of the illustrations is permitted.

square, having by its four sides four small eight-petal ro-

It turned up, that this composition had regular quantitative characteristics making its verbal description more definite. If we take for the length-unit the height of the rectangle in the three-fold figure "square between two rectangles", then the side of the square will be equal to three such units, and the relation between the sides of the rectangle framing the whole composition may be characterizes precisely as 5 to 3.

There is no reason to presume that this proportion is a trick of fate. As we shall see later, the author of the frontispiece composition was exploiting this very ability of the longer (vertical) side of the frame to be divided into five equal sections. The first and the fifth section he made into the heights of the two symmetrical rectangles holding the square between them, the third (central) section — into the diameter of the semi-circular medallion, the second and the fourth, adjoining the central one, he left as two equal "quiet" zones noticeable for the very reason of absence of any other mark (fig. 1).

This, however, does not exhaust the possibilities of a formal verbal description. If we draw diagonals within the two rectangular figures of the frontispiece — its frame and the square within it (fig. 2), we shall see something never discussed before by the investigators of Arabic manuscripts: the whole background of the frontispiece composition expressively revealing its geometric character. The discovery of this geometric background creates more comfortable conditions for further analysis — a possibility to make a formal description and interpretation of the secondary elements of the frontispiece: the octofoil, the rosettes around it, cartouches and medallions.

The octofoil in the middle of the frontispiece appears now as a figure strictly centered in relation to all its sides. Its center coincides with the point of intersection of the four diagonals. The octofoil itself blends with a circle, its radius equal to 1/5 of the height of the frontispiece, i. e. its diameter is equal to 2/5 of this height. This hypothetical circle in its turn can be regarded as blending with some square, its angles marking the centers of the four rosettes. Lines connecting the neighboring centers make the sides of this phantom square, which are also equal to 2/5 of the height of the frontispiece. In that way the space left between the sides of the large square  $(3/5c^3/5)$  and the octofoil (= the sides of the phantom square) is equal to 1/10 of the height of the frontispiece. The radius of the semicircular medallion on the horizontal axis of the frontispiece is also equal to 1/10 of this height.

The measure of 1/10 is also used for symmetrical rectangles placed above and below the square component of the triptych. It makes one half of their height, marking the axis lines upon which, as we have mentioned, the circular medallions are set. On the intersection points of the longer diagonals with these axis lines lie the centers of the semicircles rounding the butt-ends of the cartouches. On the same axes, at the same distance of 1/10 from these centers, lie the centers of the semi-circles (arches) of the second row, also involved in rounding the butt-ends of the cartouches. Their radius is also equal to 1/10 of the height of the frontispiece.

This rather boring enumeration of the details of the frontispiece is necessary to feel how easy and simple it was for the artist to operate, in fact, with just one section equal to 1/5 of the height of the frontispiece. Sometimes he was enlarging it (two, three, five times) — to build up larger elements, sometimes reducing — twice (for the semi-circular medallion, petals of the octofoil, rounding of the cartouches, etc.), four (circular medallions), eight (rounding of the cartouches) or even sixteen times (rosettes).

After all this there is no need to come back to the question, if the proportion 5:3 was chosen deliberately or not. It is clear that preliminary calculations made a part of the creative method of the artist. In this case, however, the calculations were not arithmetical. The matter is, that the proportion indicated was the necessary condition of constructing the frontispiece considered here, even if its necessity was of a limited nature, not going beyond certain border and ending at a comparatively early stage of the artist's work.

It was, in fact, enough to select a frame, its sides relating as 5:3, to ensure a spontaneous (i. e. not requiring any preliminary calculations) division of the rectangle into the figures of the frontispiece described above. The graphic way of solving this problem most probably applied by the artist could be the following.

Four concentric circles are drawn around the center of the rectangle (fig. 3). The first one, its radius equal to a half-length of the height of the rectangle, when intersecting the diagonals, gives the points which should be connected with a line to find the radius of the second circle. The intersection points of the second circle with the sides of the rectangle, if connected by pairs, divide the area of the rectangle forming the required threefold composition "square between two rectangles". The height of each of the two rectangles will be equal to one-fifth, and the side of the square — to three-fifth of the height of the original rectangle. In this way the proportions of the main figures of the composition are established in the most natural way — by graphic construction, not otherwise.

The further development of the frontispiece is ensured in the following way. The intersection points of the first circle with the sides of the rectangle indicate the axes of the minor rectangles [14]. The intersection points of the third circle with the diagonals of the square correspond to the centers of the rosettes. The fourth circle is reserved for the octofoil in the center of the frontispiece.

It turns up that the artist was solving a standard geometric problem. But the possibility of confining (fully or partly) a manuscript decoration to the solution of some standard geometric problem is very important for descriptive archaeography, because it may produce favorable conditions for an adequate verbal description of the object. The suggested criteria help to distinguish the general and the particular features of the object and in this way to develop the existing system of definitions, reducing the dependence of a description on its illustrative supplements. The constructive character of the new criteria is revealed in their ability to stimulate development not only in archaeography but even beyond its limits. Let us take the present case. Finding out, that the artist was solving a standard problem of dividing a rectangle proceeding from the inherent characteristics of this rectangle, we may ask, when, where and by whom these characteristics had been revealed? Was the problem described here really a standard problem (i. e. were similar problems usually solved by other artists)? Here we approach the range of questions belonging to the sphere of the history of science and of

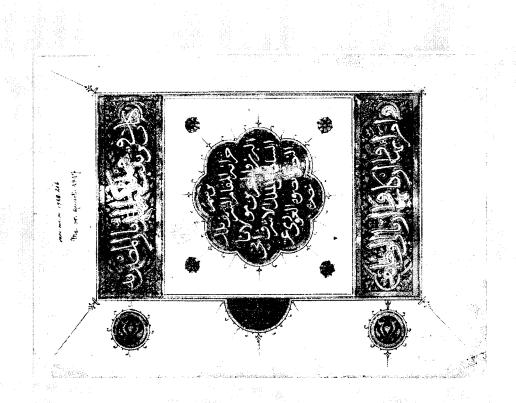


Fig. 1

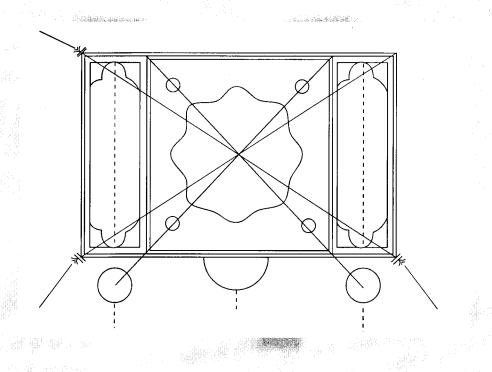


Fig. 2

applied arts. To answer them, it is necessary to start from the beginning, surveying the available decorative elements of manuscripts which, as we have mentioned earlier, are not recorded by the majority of catalogues [15].

We are lucky with the problem described here — even now we can state definitely that the Berlin manuscript (dating to the beginning of the 10th/16th century [16]) is not the earliest example of a rectangular composition 5:3. The same problem was being solved in a manuscript of 391/1000 copied in Baghdad by the famous calligrapher lbn al-Bawwāb [17]. During the five hundred years separating the two manuscripts this problem could be solved many times by different artists. We may expect that some of the decorations created by them have survived and will be discovered. Let us turn now to the sample found in the Dublin manuscript [18].

There is no resemblance between it (fig. 4) and the frontispiece described above. Their geometric background is, however, the same (fig. 5), which allows us to omit the repetition of the analysis done in the former case. Let us consider therefore the differences between these two decorations and their significance for descriptive archaeography.

Two artists select for their work rectangles of the same format, then apply the same method to mark their longer sides — first two sections on the opposite ends, each equal to 1/5 of the length of the rectangle, then the remaining three sections in the middle. What is common in both cases is confined to this procedure. We shall never find out the name of its inventor because of its great antiquity. After that follows the individual creative work of the artists. At this second stage the individuality of the artist gets enough space to express itself. The two examples given here (fig. 1 and 4) demonstrate, how different can be two patterns deriving from the same starting point. It clearly shows, that general and auxiliary components must be somehow differentiated in an archaeographic description.

To comment this conclusion we return again to our

first manuscript and its frontispiece. Beginning to work on it the artist apparently had some general and rather original idea. Under its influence his gambling with the one fifth of the height of the frame became the leit-motif of the whole composition. He played a "two boards game" simultaneously filling the space of the rectangle with the maximum number of figures and using the maximum possible number of derivatives from his standard measure (one fifth of the height) containing a hint on the characteristics of the rectangle of the format selected. If we estimate his work from this point of view, we must recognize it a masterpiece. In spite of its obvious simplicity and transparent composition (making a pleasing sight) it includes over thirty components characterized by one fifth of the height of the frame or the multiples of this measure (sides of all rectangular figures, diameters of three medallions, four rosettes, octofoil, eight components rounding cartouches, etc., up to decorative arrows projecting to the margins from the four corners of the frontispiece). This is what is called the limit. And it is not easy to surpass it on the way selected by the artist. As for the disguised manner in which the artist's idea is submitted and the apparent absence of a key to this idea — that was in conformity with the spirit of the time. Educated people highly valued various riddles and enigmas, many of them were hidden in verse and in literary works. It was pleasant to find them, and to be able to make them. The art of decorating manuscripts, as we now see, was also subject to this fashion.

The exquisite way used by the artist to build up the frontispiece is urging us to remind the reader that the Berlin manuscript was made for the Mamluk sultan Kānṣūh al-Gaurī (906—922/1501—1517) [19]. After his downfall it was considered worthy to be included into the library of the Ottoman sultan Selim I (918—926/1512—1520) [20].

Among the motifs inducing me to write this article was my eagerness to demonstrate the possibilities of quantitative methods when applied to the analysis of artistic decorations. The results obtained in this way enable us to make a more precise and informative description of the object considered than anything achieved before in this field. May be, we even could expect in the future that a description created on the basis of quantitative analysis will make the expensive photographic supplements to catalogues unnecessary, transferring them from the sphere of descriptive archaeography to that of "publicative" archaeography.

This division between publishing objects of art and their description should not, however, disturb the synchronous process of development of these two processes, now embodied in the form of a "catalogue with a photographic supplement". Quantitative analysis requires many samples,

as well as the use of such a "rough" instrument gauge. The established rules of keeping and copying manuscripts practically exclude the possibility of making all these preliminary measurements on originals. Then the originals must be substituted on scholars' desks for their copies - precise and available in the number required (like Xerox copies made from fine reproductions). From this point of view the publication of objects becomes the preliminary condition of improving the methods of quantitative analysis and of obtaining basically new materials on the history of medieval Arab applied art (as well as Muslim art in general). The truth of this statement is proved by this ve-

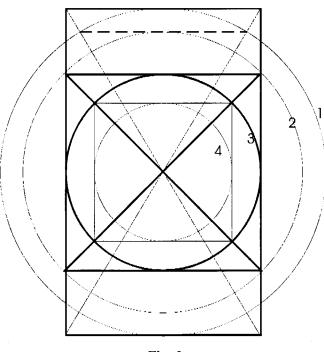
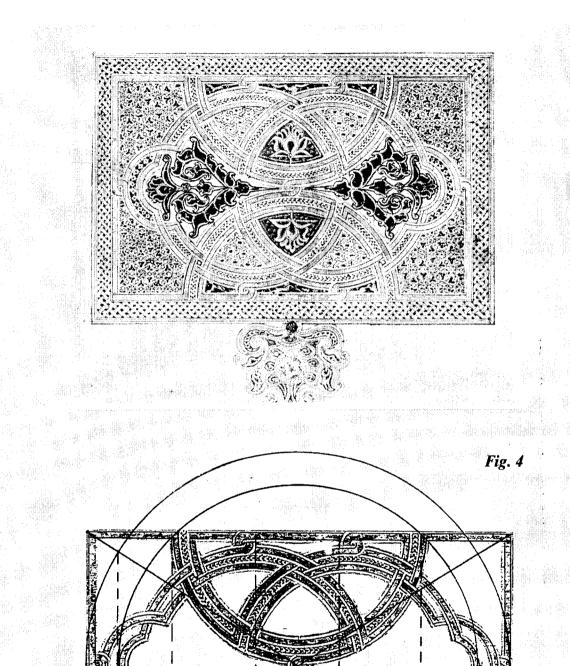


Fig. 3



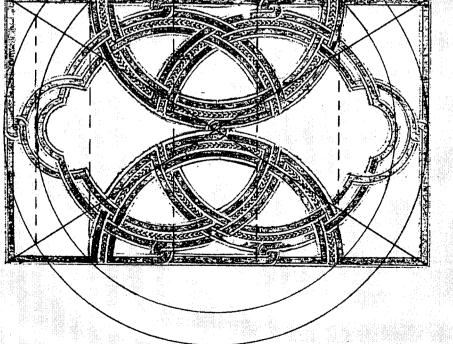


Fig. 5

ry article: its author had no choice between his desire to write it using the materials of the St. Petersburg manuscript collections — and the necessity to be content with foreign materials available through publications. It happened, because none of our samples of Arab manuscript art have been published, and it is not possible, under the present circumstances, to improve the situation.

Connecting the problem of publishing samples of book-decorations with the task of improving the way of describing illuminated manuscripts by introducing new methods, the author would like to stress the necessity of changing the style of publishing these samples. Quantitative methods require information of the highest precision.

It is time to introduce into Arabic studies what archaeologists have been practicing for a long time: to reproduce objects of codicological interest with a scale [21]. To check the scale on reproductions it will be useful to include the measurements of one or two prominent components of a decoration into their description (this concerns also catalogues of manuscripts). In the present-day practice the functions of such control measurement are fulfilled only by the size of manuscript folios indicated in most catalogues. This, however, is given with a different degree of precision. Besides that, margins are often "cut" on a reproduction, which eliminates the only evidence of its real scale.

#### Notes

- 1. F. Déroche, Les manuscrits du Coran. Du Maghreb à l'Insulinde (Bibliothèque Nationale. Catalogue des manuscrits arabes. Deuxième partie: Manuscrits musulmans, Tome 1, fascicule 2) (Paris, 1985).
- 2. G. Schoeler, Arabische Handschriften (Verzeichnis der orientalischen Handschriften in Deutschland. Bd. 17. Reiche B, Teil 2) (Stuttgart, 1990).
  - 3. Here I have in view the limited number of catalogues published during this period rather than the length of the period itself.
- 4. Catalogue of Arabic Manuscripts (Yahuda section) in the Garret collection, Princeton University Library. By R. Mach (Princeton, New Jersey, 1977); Arabskie rukopisi Instituta vostokovedeniia. Kratkii katalog (The Arab Manuscripts from the Institute of Oriental Studies. A Brief Catalogue), ed. A. B. Khalidov, pt. 1—2 (Moscow, 1986) etc. Attributing these catalogues to a special group we were taking into account not the inner motifs of their authors or the circumstances of their work, but only the place held by these catalogues on the evolutionary scale of the descriptive genre. This evolution has never been treated in the arabistic literature, which makes it worthy of a special consideration, in connection with the development of computer catalogues in particular.
- 5. The best examples are the already mentioned catalogues by F. Déroche and G. Schoeler, also the two volumes by R. Sellheim, *Materialen zur arabischen Literaturgeschichte*. Teil 1—2 (Wiesbaden-Stuttgart, 1976—1987) Verzeichnis der orientalischen Handschriften in Deutschland. Bd. 17. Reiche A, Teil 1—2.
- 6. Photographic supplements to catalogues of Arabic manuscripts were used at first to collect paleographic materials to enable the dating of manuscripts containing no dates by handwriting. It was connected with the preferential orientation of arabistic archaeography towards text-publishing. The orientation has changed, but the supplements are still made, in most cases, as paleographic albums.
- 7. A catalogue by A. J. Arberry, *The Koran Illuminated. A Handlist of the Korans in the Chester Beatty Library* (Dublin, 1967)—is, probably, the only work written in this genre. We should not forget, of course, that there is a number of exhibition catalogues, but their main task is not the description but the selection of illuminated manuscripts from the total number of books. Descriptions given in works dedicated to illuminated manuscripts are brief, their function is supplementary. The general survey of this literature is given in: D. James, *Qur'ans of the Mamluks* (New York, 1988), p. 12—3. Pages 219—49 contain the descriptions of 73 illuminated copies of the Koran.
- 8. This problem is considered in my article "Hudozhestvennye 'unvany v arabskikh rukopisiakh" (Decorative 'Unvans in Arabic Manuscripts) in print.
  - 9. Berlin. Staatsbibliothek Preussischer Kulturbezitz, Ms. or. quart. 1817.
  - 10. M. Weisweiler, Der islamische Bucheinband des Mittelalters (Wiesbaden, 1962), p. 88, no. 28.
- 11. Islamische Buchkunst aus 1000 Jahren. Ausstellung der Staatsbibliothek Preussischer Kultbezitz. Berlin: vom 25 März bis 24 Mai 1980 in Berlin, vom 9 October bis 23 November im Wissenschaftszentrum in Bonn (Berlin, 1980), p. 45, no. 018.
  - 12. G. Schoeler, Arabische Handschriften, p. 162-5, no. 161; Abb. 83-6.
- 13. The description was done by Dr. Hans-Caspar Graf von Bothmer (Saarbrücken) who helped G. Schoeler to describe the illuminated manuscripts included in the catalogue (Schoeler, *Arabische Handschriften*, p. X).
- 14. The axis line is dividing the height of the minor rectangles in half. Knowing this, it is possible to construct them not implying the second circle.
- 15. Sometimes there are rare exclusions. The Catalogue of the Institute of Oriental Studies of the Russian Academy omitting, for the sake of brevity, many other characteristics (even the size of folios), is regularly mentioning the presence of 'unvans and frontispieces.
- 16. This date is founded on the exlibris of the Mamluk Sultan Kansuh al-Gauri and the stamp of the Ottoman Sultan Selim (see below, notes 19 and 20).
  - 17. A. J. Arberry, op. cit., p. 15, no. 41, pl. 26 [MS. 1431].
- 18. Besides Arberry's catalogue (see note 7) it is reproduced on p. 14 of D. James' book (see note 7). James is defining it as a "finispiece"—according to its position in the manuscript.
  - 19. G. Schoeler, Arabische Handschriften, p. 165.
  - 20. Ibid., The stamp of Selim I on folio 1a is reproduced in the supplement to the catalogue, Abb. 83—4.
  - 21. The first (but still the only) example of this attitude is the catalogue by F. Déroche mentioned above.

### Illustrations

- Fig. 1—2. Ms.or.quart.1817, fol.1a (Staatsbibliothek zu Berlin-Preussischer Kulturbesitz, Orientabteilung). Frontispiece and its geometric background.
  - Fig. 3. Some peculiar geometric properties of the rectangle 5:3.
  - Fig. 4—5. Ms. 1431, fol. 285a (The Chester Beatty Library, Dublin). Finispiece and its geometric background.