

TREATISE ON SYMMETRY IN MOSAICS

JÓZSEF RÓBERT BALÁZS AND MIKLÓS ERNŐ BALÁZS

Name: József Róbert Balázs, Painter (b. Budapest, 1930)

Address: Toldás köz 16, Budapest, H-1037 Hungary. *E-mail:* jrbalazs@axelero.hu

Fields of interest: Fine arts, decorative and ornamental arts (music, geometry, mathematics, architecture).

Awards: Ferenczy Noémi Award 2002; Hungarian Academy in Rome Scholarship 2004.

Publications: Articles on his sculpture in the Observatory at Piskéstető (Mátra Mountains, Hungary) and on his other activities in various periodicals, e.g. *Budapest* [periodical of the capital city], 1972; *Művészet* [Art, in Hungarian], 1985; *Magyar Nemzet* [a daily], 1986; *Hungarian Decorative Art*, 2003.

Exhibitions: *Hungarian Artist in New York*, Gallery Lys, 1965; Kecskemét, Hungary, 1964 [one-man show]; Csók István Gallery, Budapest, 1985 [one-man show]; Vigadó Gallery, Budapest, 1990 [joint exhibition with Miklós Ernő Balázs]; Balaton Museum, 2004 [joint exhibition with Miklós Ernő Balázs].

Name: Miklós Ernő Balázs, Mosaic Artist (b. Budapest, 1960).

Address: Toldás köz 16, Budapest, H-1037 Hungary. *E-mail:* balazs.miklos@mailbox.hu

Fields of interest: Fine arts, decorative and ornamental arts, mosaic art (travel, museums).

Awards: "Diplome Honoré" of the École Nationale Supérieure des Beaux Arts, Paris, 1985; Podmaniczky Award for the embellishment of the Capital, 2002; DLA degree at the University of Decorative Arts, 2004.

Publications: lots of articles in professional periodicals on mosaics made by him and about him

Exhibitions: Budapest, Vienna, Paris.

Abstract:

1. *Plinius (Roman writer) on marble processing, how he condemned the quarries as demolition of nature. He explains the marble cutting, and from this method the apparition of the so-called "open stones".*
2. *Symmetric series in decorative mosaic art. In the field of decorative art, symmetry is very common, almost everywhere applied method of decoration, mostly in floors.*

3. *Symmetry in representative mosaic art. Repetition - in a broader sense- can be also considered as symmetry when applied to multiple figures. The main figure is often surrounded by other ones symmetrically.*
4. *Bordures. Similar to number 2.*
5. *Symmetric elements in some of our mosaic works. Our mosaic / intarsia style is between the traditional and modern apparition. We apply the "open stone" method in some cases in our representative compositions.*

1 PLINIUS, ROMAN WRITER AND HISTORIAN

Plinius (23 BC-79 AC) deals with marble processing. He condemns the quarries as ruiners of the nature, just for excessive luxury. Sculptors preceded the use of marble blocks for figures before the production of stone slabs was installed. According to the procedure, marble blocks were cut by iron blades moving to and fro under pressure, sand was scattered between the blade and the stone, this made the grinding effect. In other case iron cord moved around, pressing the sand to the cord, which submerging in the stone finally let it fell apart to slabs. Marble is full of veins. After the cut these patterns of veins come to light, and as the result of the slicing, the stone opens as a book and gives symmetric patterns in the juxtaposed left and right sides. It was common decoration mainly in the period of building baroque churches. As a very attractive embellishment, it is often in use nowadays.

2 SYMMETRIC SERIES IN DECORATIVE MOSAIC ART

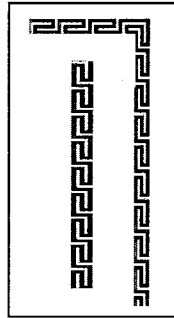
Plain surfaces, particularly in floors attract pattern's multiplication. A floor is confined to the size of the chamber where it is laid. By repeated elements the feeling can be extend far away outside of the room where it is really set. Ancient mosaics were made mainly of marbles. There were workshops where movable square-size mosaic compositions were produced aimed at carrying to far-away building sites. Local setters surrounded the prefabricated piece by other - usually symmetric - patterns. There are symmetries not only with just one axis, but also with two (or n) symmetry-axes, resulting two-fold (or n -fold) symmetric patterns.

3 SYMMETRY IN REPRESENTATIVE MOSAIC ART

Repeated elements - in a broader sense - can be considered as symmetry. The repetition can strengthen the statement. In the case of one-axis, or chiral, symmetry the reflected

side affirms the reflecting one, altogether the whole of the representation is emphasized. This composition-enhancement can be observed in the famous Ravenna mosaic in the Church San Vitale depicting the imperatrice Theodora and her escorts.

4 BORDURES



The symmetry appears most clearly in band-decorations, called bordures. They often frame representations separating them from the background. In other cases (mostly in architecture), they give just a simple decorative effect without any other purpose. There are simple repetitions, which run along the band, also chiral-symmetric elements multiplying themselves in an infinite run. There can be more than simple symmetries extending along the bordure.

Fig. 1. Classic bordure (Roman pattern).

5 SYMMETRY IN SOME OF OUR WORKS

- a) *Communication*, marble mosaic 1,30 x 3,00 m, Hungarian Telecommunication Company, Sopron Headquarter.
- b) *Music*, marble mosaic 1,30 x 4,04 m, based on the similar oeuvre in the Bodor Pál Music Conservatory, Kecskemét, Hungary.
- c) *Budapest*, marble mosaic 27 sq.m. Hotel Benczúr, Budapest.
- d) *Crystal-Sphere*, d=1.40 m, Budapest Bank Headquarter, Budapest.

ILLUSTRATIONS:

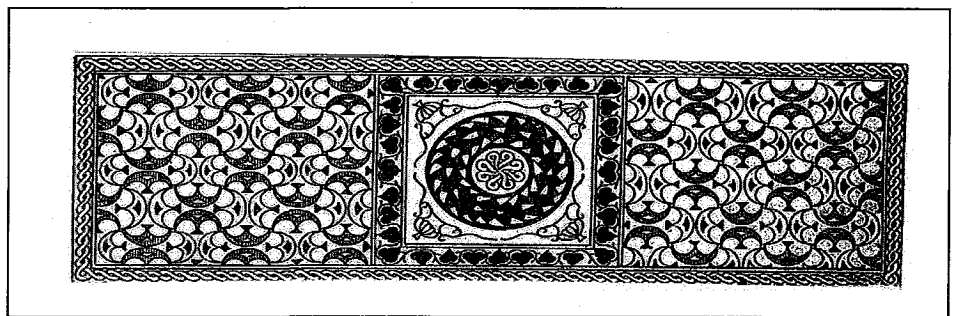


Fig. 2. Antic floor (Garden in the School of Bielle, France).

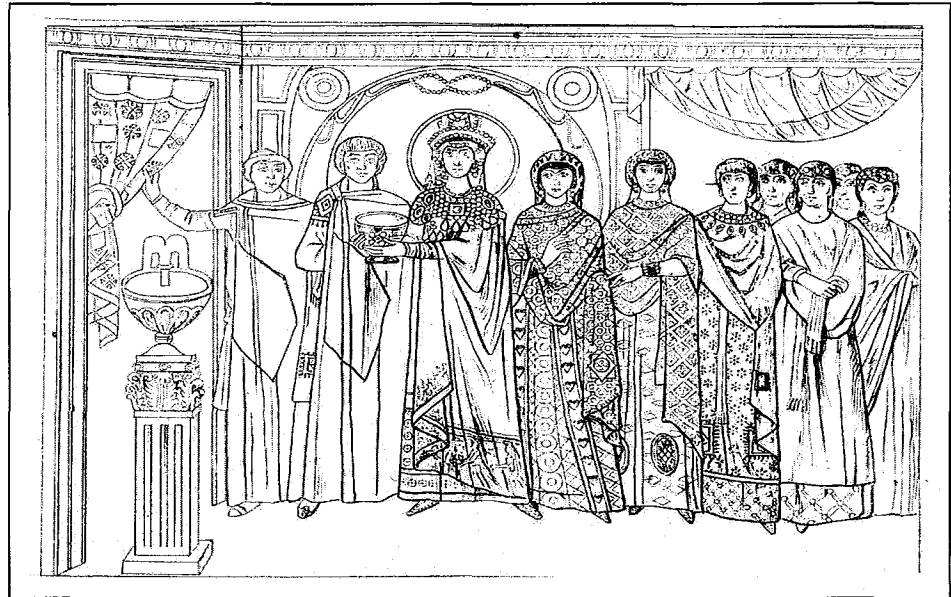


Fig. 3. The Escort of Sovereign Theodora, mosaic, Saint-Vitale, Ravenna, XVI.century.



Fig. 4. *Communication*, marble mosaic, Headquarter of "Matáv", Sopron, Hungary.