

SYMPOSIUM Symmetry of Patterns

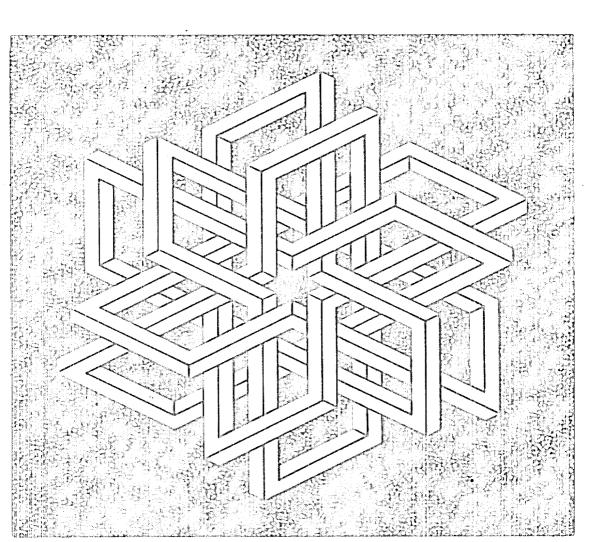
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## SYMMETRY OF PATTERNS

Extended Abstracts

## COMPARISON OF THE SYMMETRIES OF THE CELTIC AND AVAR-ONOGURIAN DOUBLE FRIEZES FROM ARCHAEOLOGICAL FINDS

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"Basic" and double friezes were defined in order to classify the ornamental structures of the medieval art of peoples in the Carpathian Basin coming from the Eurasian steppe in 6.-9. C. A. D. /Bérczi, 1985, 1989./ The definition based on a new classification of the frieze patterns according to their neighbour-generator characteristics. This neighbour-generator operation was used in generation of the second frieze-thread of double friezes. In the first comparison of Avar-Onogurian and Celtic double friezes /Bérczi, 1989. CAMWA 17. No. 4-6. 715-730./ only 9 Avar-Onogurian and 2 Celtic double-friezes were found of the 20 double friezes set. Since that time a new fundamental and rich book has been published /Megaw and Megaw: Celtic Art, Thames and Hud+. son, 1989./ about ornamental art of Celts. On the basis of this book 6 Celtic double-friezes were identified by the author /Bérczi 1991./. These 6 double-friezes are all /except one/ such structures, which can be found in later Avar-Onogurian art. This overlaping between the two sets may reflect survival of certain structures in the art of local communities. Ornamental structures might serve as intuitive products of craftsmen which has been scattered with the material products themselves.

Bérczi Sz./1985/ Escherian and Non-Escherian Developments of New Frieze Groups in Hanti and Old Hungarian Communal Art,/lect.in Rome, 28th March, 1985/ in: M.C.Escher: Art and Science /Proc. of the Escher Congress/ H.S.M.Coxeter et al. eds. 349-358.North-Holland, Amsterdam, 1986.

 Bérczi Sz./1989/ Symmetry and Technology in Ornamental Art of Old
Hungarians and Avar-Onogurians from the Archaeological Finds of the Carpathian Basin, Seventh to Tenth Century A.D. /in: Symmetry
I.Hargittai ed., Computers Math. Applic.CAMWA.17.No.4.-6. 715-730./ Pergamon Press, Oxford,

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"Basic"and double friezes /Bérczi, 1986./ and the corresponding Celtic ornamental representations from archaeological collections /Bérczi, 1991.In: Lukács, B. et al. eds. Symmetry and Topology in Evolution. MTA-KFKI-1991-32/C. Budapest, Hungary./