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ISLAMIC STAR PATTERNS - NOTES

A. J. LEE, from November 1975

Summaries of main results of
Researches into the Geometry
of Islamic Star Patterns.
during Nov 1964 -

These notes are fairly haphazard, so no detailed lists of contents are feasible, but a few major topics are listed below

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pink underlinings on the left
inst of pp. ii-iv are from earlier
filled notes, and should be ignored.

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Islamic Star Patterns - Notes

I first became seriously interested in studying Islamic geometric ornament, and especially the star patterns, in November 1964, after borrowing a copy of "Moorish Spain" by E. Sordo & W. Swaan (1963) from St Albans public library.* I had always been interested in mathematics, particularly geometry and symmetry, and tilings of various plane surfaces - euclidean plane, sphere, hyperbolic plane, and multidimensional polytopes, so my mind was ripe for what was up until then a totally new field of inquiry for me.

Although the book just referred to did not concentrate on geometric patterns there were nevertheless enough examples illustrated to give me the impression that the star patterns could be systematically studied, not only at the purely geometrical level, individually for each new pattern, but at a higher level, generalizing method of motif construction, & of means of linking groups of motifs into units of repeating patterns. Indeed, many patterns could obviously be grouped into related series so clearly that often "missing" members of a given series could be reconstructed, which I did not at first realize were to found as authentic Islamic patterns outside Spain. My interest was thoroughly fixed, so I began searching the shelves of the public library for any kind of books which might give photographs of Islamic ornament. These included travel books as well as more specialist books on Islamic art and architecture.

One book from the public library which particularly started me reading the more interesting publications on the subject was "The Legacy of Islam", edited by Sir Thomas Arnold & Alfred Guillaume (1931). From this book, and "Islamic Architecture and its Decoration" by D. Hill & Oleg Grabar (1964)* I was able

* I bought my own copy on 6 February 1968.

* My copy is dated 20 March 1965; I purchased a second copy on Feb 1976.

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to borrow a number of works through The St. Albans public library; among these were
E.H. Hankin (1925) "The drawing of ^{Geometric} ~~Saracenic~~ Patterns in Saracenic Art";

M. J. Borgoin (1879) "Le Trait des Entrelacs";

B.P. Denike (1939) "~~Uzbekistan~~ ^{Central Asian} Architectural Ornament";

L.I. Rempel (1961) "Uzbekistan Architect. Ornament";

The last two publications being in Russian.

All these works were examined in the first half of 1965, and by the end of 1965 I had thoroughly laid the foundations for a good deal of my subsequent studies into the geometry of the star patterns. Over the year numerous files of notes, sketches and detailed drawings began to bulge, notebooks were filled and my own bookshelves began to see an increasing number of works devoted to Islamic Art and culture.

Since I did not have access to a photocopier at first, I copied out by hand large chunks of the text of various books I borrowed, taking the illustrations where feasible. In this way I traced almost all of the 200 plates from Borgoin's work, copying out all the French notes to each plate, and I copied whole chapters and illustrations, in Russian, from Rempel's book in the same way. Most of the papers by Hankin I also copied, and I still have my original hand copies of these works. Dover Books subsequently (1973) reissued the plates from Borgoin's book*, but I don't think my earlier effort was in vain, since it was an extremely useful exercise in industry and pattern drawing.

As well as examining a wide selection of books of all kinds, from public library and University College library*, I also borrowed a few colour slides from a number of people, including Dr. Jenny Partridge, Prof. Hans Cönnigsberg, Mrs Jan Beece (then Mitchell) and my cousin Mrs Joyce Kraus (née Folds).

* London

* under the title "Arabic Geometrical Pattern and Design."

