# PERSIAN RUGS: ANALYSIS OF SELECTED DESIGNS

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PERSIAN RUGS: ANALYSIS OF SELECTED DESIGNS

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# CHAPTER I

## INTRODUCTION

> Mankind is a weaver who, from the wrong side, works on the carpet of time. The day will come when he will see the right side and understand the grandeur of the pattern he, with his own hands, has woven through the centuries without seeing anything but a tangle of strings.[1]
>
> La Martine
> Conquest of the Atlantic

Persian rugs are hand woven, hand knotted works of art having a tradition that is several thousand years old. Iran is now the country that has this fine, long heritage of the weavers' art known as Persian rugs but sometimes called "magic carpets." The magic comes from the materials used, the colors selected, the patterns developed and the techniques used in the weaving, and the knots tied. However, the "real" magic comes from within the weaver.

Persian rugs are made of wool, cotton, silk, goat hair, or camel hair woven into patterns that employ symbolism. A. Cecil Edwards, in "The Persian Carpet," states that the various symbolic interpretations given should be taken with some reserve, for the Iranians are an art-loving people who regard a pattern as a work of art in itself.[2]

All Persian rugs are handmade using a technique that is similar; the differences are because of the variations in the knots and the way they are tied. Each process is very time consuming and exacting. Nomad rugs are made by women, with the help of their children; town

workshop rugs are made by men and women with perhaps as many as 20 looms in a shop. A good craftsperson can tie as many as 14,000 knots a day, but a good rug can have as many as 320 knots per square inch. It is thus easy to understand that a single rug may take many months or years to produce--to produce these unique, treasured works or art.

## Purpose

The purpose of this study is to explore that aspect of Persian rugs related to design. Design analysis related to location of groups of people, tribes, families, or workshop workers who produce rugs will be the main emphasis of this thesis. Persian rugs, for which the country of Iran is famous, will be studied to determine the relationship between design and geographical location of production.

## Method

The writer elected to study the design aspects of Persian rugs to determine the relation between rug design and the geographical location of the village or town where the rugs were produced in her native country of Iran. The technique of weaving and knotting used, as well as the colors of the yarns, would be investigated as they related to the design of these handmade art treasures.

A review of the literature was undertaken in the library of Oklahoma State University. This preceded the return of the writer to Iran during the summer of 1978. In the capital city of Tehran, further research was possible at the famous "Rug Museum." Though this

museum was only two years old at that time, the opportunities for research were exceptional. The collections of old and new rugs are extensive, many having belonged to previous kings or very rich people. Weaving demonstrations were included, as well as films and an excellent library.

The library included books on Persian rugs, Chinese rugs, and rugs from other countries, books written in Farsi, the Iranian language, French, German, and English. It was possible to take slides in the library but not in the galleries. The writer took over 400 slides to bring back to the United States, along with a film on rug production. Many days were spent at the "Rug Museum."

As part of this research, rug companies belonging to the government in Iran were visited. The sketching or design rooms, the weaving and sales spaces were studied in Tehran. At Karaj, 30 miles from the capital, a large rug company was visited. All aspects of the rug industry were studied here, including cleaning and washing the wool, spinning, dyeing, and weaving. Several small workshops in villages were also studied.

After returning to Oklahoma State University further review of the literature was undertaken, as well as review and analysis of the slides. This, plus the site visits and the writer's long, firsthand familiarity with Persian rugs, comprise the method of study for this thesis.

FOOTNOTES

[1]Elizabeth Baity, Man is a Weaver (New York, 1942), title page.

[2]Preben Liebetrau, Oriental Rugs in Color (New York, 1963), p. 24.

# CHAPTER II

## HISTORY

There have been many theories about rug weaving in Persia and yet the origin of this art is unknown. The first references regarding this art indicate that it occurred in the tenth century, but the Pazirik and Bush Adar suggest that the art of rug weaving in the Middle East is several thousand years old. The indication that either the Selyuks or Mongols brought carpet weaving to this area can no longer be given credence. As information is incomplete, it is best to start our discussion with the Safavid era. Under the 19 rulers of the Safavid era, which came into being in 1501 and was overthrown by the Afghani invasion of 1722-23, Persia experienced the glorious flowering of this art. The sixteenth century is therefore of great importance in the study of Persian carpets. The period from 1499 to 1722 is considered to be the classical period of Persian carpet weaving. The first carpets appear in a miniature form. These were covered with repeating rectilinear figures and before the Safavid this art was no more than a village craft. Under the Safavid patronage, the design was revolutionary and the pattern became more curvilinear than rectilinear.[1]

Highly developed techniques became necessary to form the new patterns. Now the pattern must be drawn out before the actual weaving of the carpets. Despite thousands of pages of speculation, very little is

known about these carpets and it is unlikely there will ever by any specific information about them; however, this problem may be approached from several directions. One way is to attempt to date the carpets and locate the place of origin. From this information one can outline a coherent picture of the development of weaving during the Golden Age.

The famous Ardebih mosque carpet now in the Victoria and Albert Museum in London provides us with the date of 1539. This carpet is among the 2500 to 3000 carpets and fragments that have survived from that period.[2] We also get the dates of carpets, when they were made, certain types of carpets from the European princes who owned them or ordered them to be woven. An implied relationship is the last method of dating carpets. This process involves comparisons of patterns in the carpets with other arts such as architecture and miniature painting, the dates of which are often easily established.

Establishing the locale or place of origin of carpets is more difficult and only a few early carpets have been given a definite place of origin. The place of origin is usually done through the grouping of carpets according to make and design, and then assigning to them the particular city where they are thought or known to have been made. This process has created a great deal of controversy among art historians. Four major areas are frequently chosen to be the center of production: Central Persia, Tabriz, Kerman, and Eastern Persia.

From available historical data, Kashan and Isfahan in Central Persia appear to be the most important areas. Carpets are said to

have been woven in these places since the beginning of the seventeenth century. Kashan has been and presently is credited with the manufacturing of silk pile, a material more commonly used for warp and weft. In other weaving centers, and in the so-called "Vienna hunting carpet," many silk and metal brocaded carpets could have been made in Isfahan, because Shah Abbas in Central Persia is known to have established a court factory in Isfahan to facilitate carpet weaving.

Tabriz is listed as the most significant place of carpet manufacturing. This city was the first Safavid capital, and may have been the most significant place in the manufacturing of Persian carpets, because from history we gather that the Turks overran this city four times during the sixteenth century, and that the seat of government moved first to Kazvin and finally to Isfahan. Kazvin, however, is not known to have had any carpet factory and in recent times is not considered a weaving center.[3]

Kerman was laid to ruins by Mohamad-Aga Gajar in 1794. There is little evidence of carpet weaving in this city, although the art may have been taken up after Afghan invasions. The place is, however, thought to be the manufacturing center of the Vase carpet, a group of floral carpets.

The last major area that remains is eastern Persia. This area has been considered the probable place for the manufacture of the Safavid carpet. There are controversies over the manufacture of a certain number of carpets. Some of the carpets that have been originally assigned to this area may have been produced in India. There is a large group of carpets known as Shahroukh carpets, named for King

Shahroukh, that may have been woven in this area, because this was the major city of the district of the capital at Shahroukh in the early sixteenth century. By the early nineteenth century carpet weaving in the classical Persian style had ceased being manufactured in this area.

## FOOTNOTES

[1]Kurt Erdmann, Seven Hundred Years of Oriental Carpets (Berkeley and Los Angeles: University of California Press, 1970), p. 133.

[2]Ibid., p. 137.

[3]Ibid., p. 140.

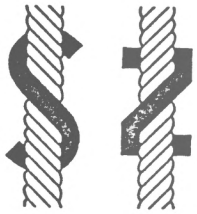
## CHAPTER III

## TECHNICAL INFORMATION

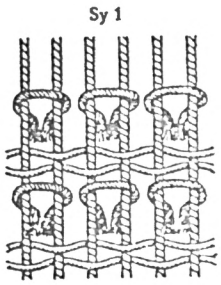
Knots are the bases of all Persian rugs. There are two kinds of knots: the "S" and the "Z." The "S-plied" is plied in a clockwise direction and the "Z-plied" is plied in a counter clockwise direction. We understrand with plied twisting and spinning, respectively. If a weft shows in the length of one knot width with no plying, then it is not twisted and shows only the spinning direction. The same is for the knot or the pile (see Figure 1a).

The symmetric knot surrounds a pair of warp threads, so that it grips them from the top, running from both sides to the bottom and passing upwards back in between the pair of warps (see Figure 1b). The asymmetric knot goves over a pair of warp threads in such a way that one of the warps is completely covered, while the other warp is covered by the second half of the knot only on three sides, the upper quarter of the warp thread is free. The thread which is surrounded on all four sides may lie to the right or the left, and this distinction gives us two different types which, for convenience, are labeled "As 1" and "As 2" (see Figure 1c).[1]

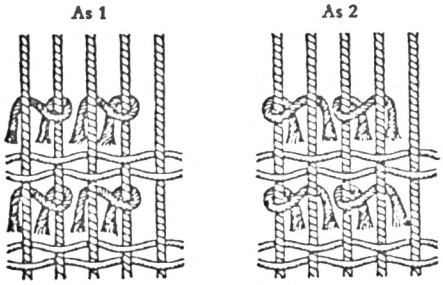
The weft, together with the warp, forms the base of the carpet. It runs at right angles to the warps, over one warp and under the next and so on, and normally is placed after each row of knots, locking them in position. The position and tension of the weft is very



a. a. "S" and "Z" Knots




b. "Symmetric" Knots




c. "Asymmetric" Knots

Figure 1. Knot Samples

important and causes other knot forms. When the first weft after each row of knots in waves the two warps will remain on one level, or nearly so. In this situation we will have three kinds of knots. In the case in which the weft runs in a straighter line than in waves, we will have four other knot forms. Because we get through right or the left hand warp thread lies, higher, we get two more different symmetric and asymmetric knots each (see Figure 2). The terms of symmetric or asymmetric explain only their position on the two warp threads and nothing more. Therefore, we prefer the terms of Persia and Turkish or even Senner or Ghirodes knot.[2]

We have enough references that these names mislead scholars and other people to believe that only Turkish people used Turkish knots and Persian people Persian knots. And as we made the experience all the Senne rugs we introduced in this catalogue are not in so-called Persian or Senneknot but in symmetric (so-called Turkish) knot.

Knot count: Given as number of knots in warp direction x number in weft direction per 10 cm.

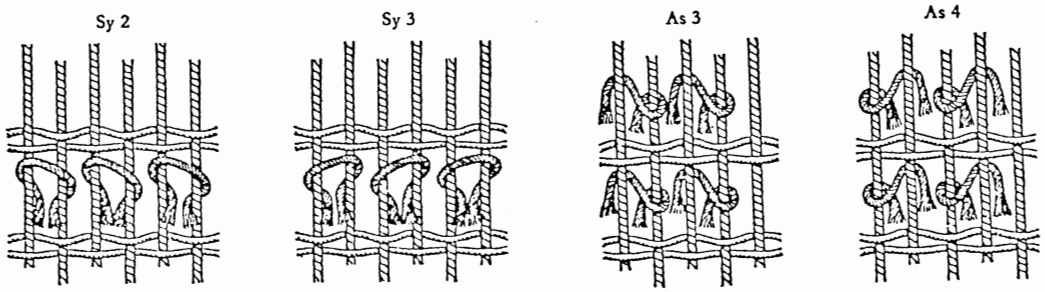
Handle or touch: Approximate characterization of pile, thickness, and back of the rug in that order.

Surface area data: First length, then width, both measured in the center.

Upper end: Generally the place where the piece ends and where weaving was completed.

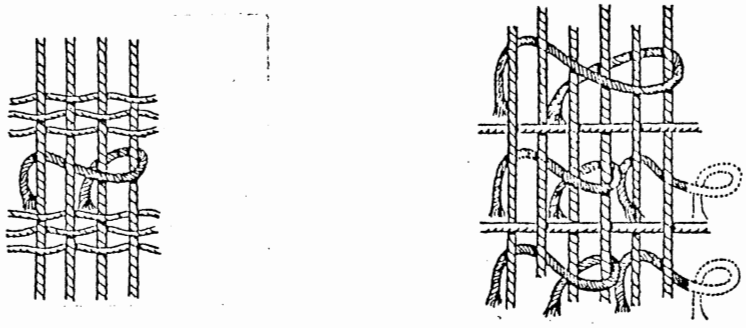
Lower end: Where the piece was started. Work begins in the direction opposite to that of the pile.

Colors data: Names of colors and shades are translated from those given in "Taschenlexikon der farben" (I/440 names of colors and shades)




a. Symmetric Knots

b. Asymmetric Knots



c. Asymmetric Knots on Four Warps

d. Asymmetric Knots on Six Warps

Figure 2. Symmetric and Asymmetric Knot Samples

by A. Kornerup and J. N. Wanscher, Zurich and Gottingen, 1961. Color data ignore abrash variation which may result from a number of causes.

The carpet shown in Figure 3 is knotted with Turkish or Ghiordes knots. Note that when counting in one direction (from the ruler downwards in Figure 3), a Turkish knot can easily be taken for two if you are not careful. This is because the Turkish knot is looped around two warp threads, as shown. A knot is marked in the ring to the right of the pencil (Figure 3).

## Production, Structure, and Material

The knotted carpet (farsh, ghali, in Turkish halil) is produced by a combination of weaving and knotting: the short knotting threads are introduced during the weaving of the ground fabric out of warp (tun, chala) and weft (pud, argach). The protruding regularly held brush-like ends of the knotting threads together form the pile (takhta). The knotting process is always the same, whether the producers are nomads or semi-nomads, sedentary rural or urban families, working on their own account or for commission, or manufacturers employing wage earners.

The looms (dasgah) on which the work is carried out are in principle rigid rectangular frames round which the warp threads are stretched vertically. A simple arrangement allocates all the even threads (2, 4, 6, etc.) and all the uneven threads (1, 3, 5, etc.) to be pulled forward alternately so that the horizontal weft or woof threads can be drawn between them. The simplest form of loom are used

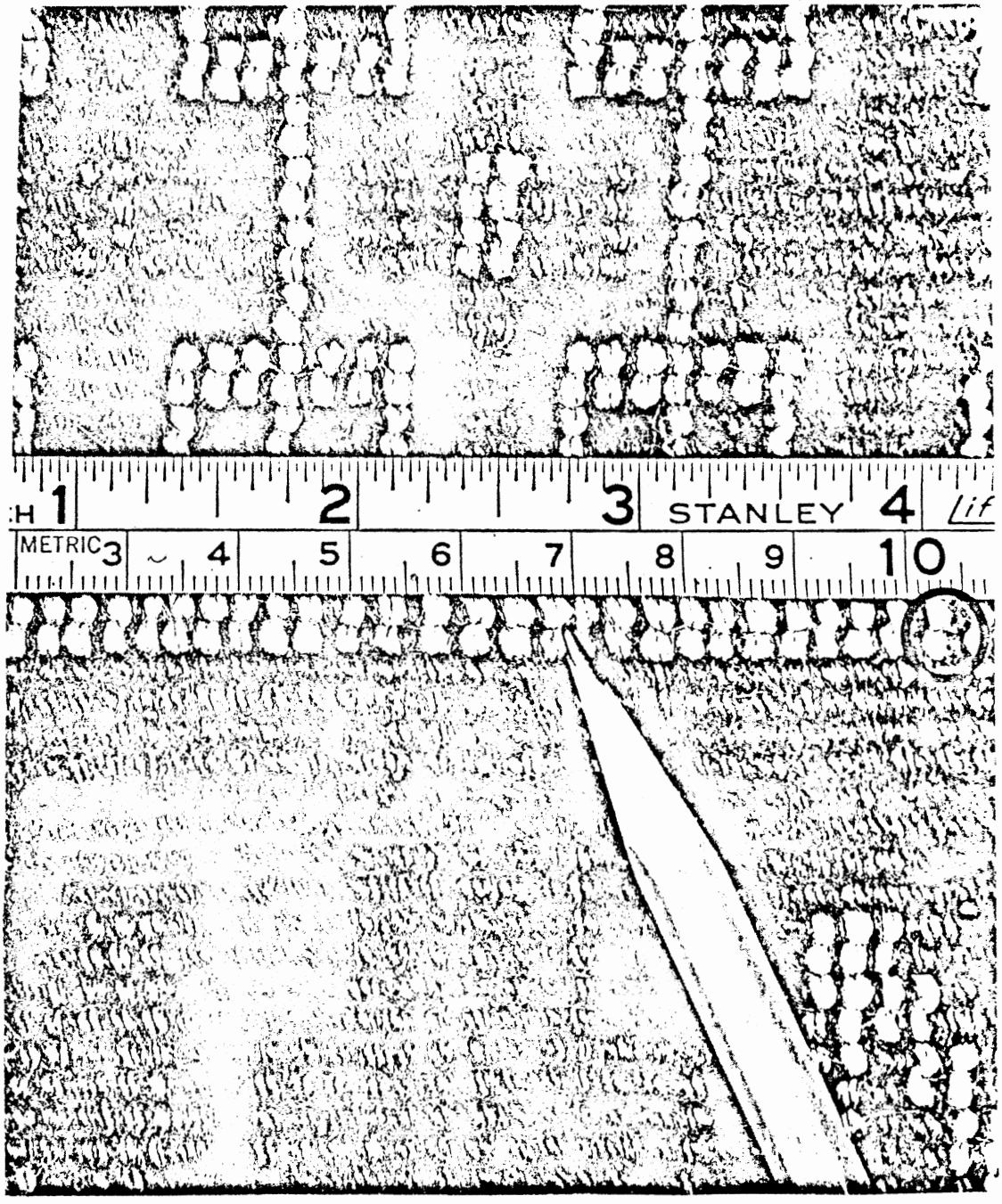



Figure 3. Counting the Knots on the Back of a Carpet

by the nomads, since they need to fold up their work and loom each time they move. They do sometimes use a vertical loom with a collapsible frame, but usually prefer the primitive horizontal loom without side beams.

Side beams are not necessary on the horizontal loom because the transverse beams over which the warp threads are drawn are held in a horizontal position by stakes driven into the ground. Thus, the warp is held under tension in a very simple, but far from perfect, manner. A tripod of lashed rods is placed over the loom1 On it hang the skeins of wool for the knot, while below is placed the mechanism for making the shed, which also presses back the lower warp threads into a level with the upper warp threads when the row of knots is done.

At first the knotter squats in front of the loomk later largish stones are placed on either side of the warp as a support for a board laid across them on which she squats over her work. If she has to stop because of a migration or a storm, the stakes are pulled up and the front cross beam with the beginning of the carpet on it and the free remaining warp threads are rolled up to the rear cross beam.

On the collapsible vertical loom the finished work is rolled onto the lower cross beam as the work proceeds, so that the knotter squatting on the ground in front of the loom always has the row of knots at a convenient height. In this case, the warp cannot be fixed onto the upper cross beam. It is held by a warp bar which hangs from the upper cross beam and can be let down as the finished fabric is wound onto the lower cloth beam.

Figure 4 shows the usual manner in which the warp is set up: its threads run unbroken round the lower and upper warp beams and turns back each time it has run around a cross bar. The carpet is begun close to the bar. From time to time the tension is slackened (by loosening the wedges) and the finished part of the carpet is pulled, together with the warp and bar, either downward or up the back. When the carpet is complete the warp threads above the upper end are cut off and are usually either plaited or knotted. The loops of warp left after withdrawing the bar at the lower end are subsequently filled up with wefts or they twist up on their own.

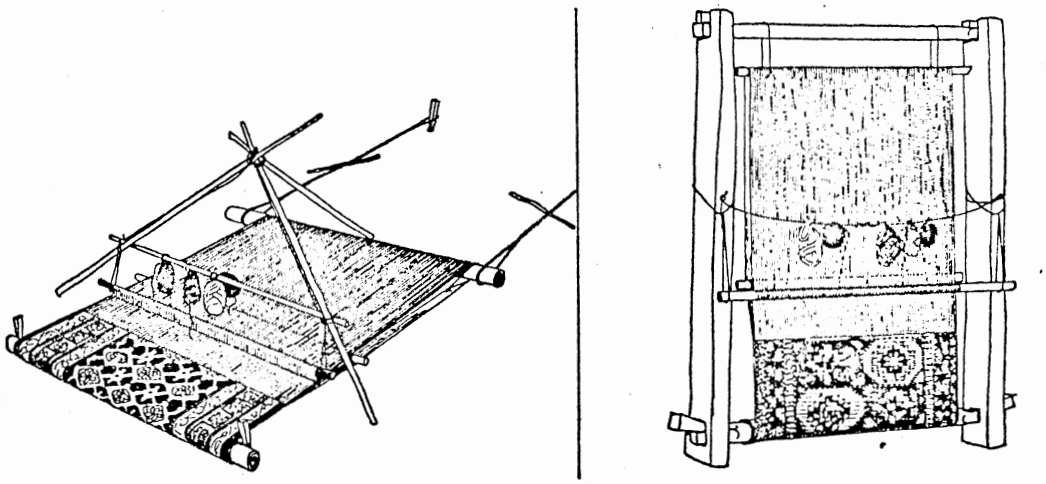


Figure 4. Horizontal and Vertical Loom Construction

With these methods it is practically impossible to set the warp threads back into the same position and tension after each interruption. Hence, a nomad carpet nearly always has considerable variation in its width and sometimes in its length as well. Having to be light so that it can be transported, the loom is seldom very stable, and this limits the width of carpet the nomads can produce. They can reach considerable dimensions in length, because the warp can be made as long as they wish--stretched out on the horizontal loom, or wound around the warp bar on the vertical.

The manufacturers are free of these limitations. The heavy, stable construction of the looms allows the fabrication of wide carpets. There is no difficulty in slackening the cloth beam so as to pull down the warp evenly along its whole width and pull up a section of the knotted surface behind the work, and then setting the warp again in its previous position and tension by driving in the loosened wedges. To avoid having to perform this time-consuming operation too often, the board on which the knotters squat can be placed at either end on the rungs of a ladder and lifted up a rung from time to time. With the simplest looms which allow no movement of the warp the sitting board has inevitably to be raised as the work goes on. These lengthy interruptions are eliminated with looms that have rotating warp and cloth beams, and with the modern steel looms such as those developed in central Europe where, before the first war (as in Germany also), knotted carpet manufacturers tried in vain to compensate for the higher wages they had to pay be a much higher degree of rationalization. (See Figure 5 for warp mounting.)

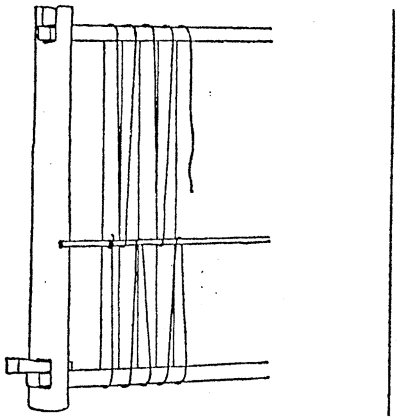
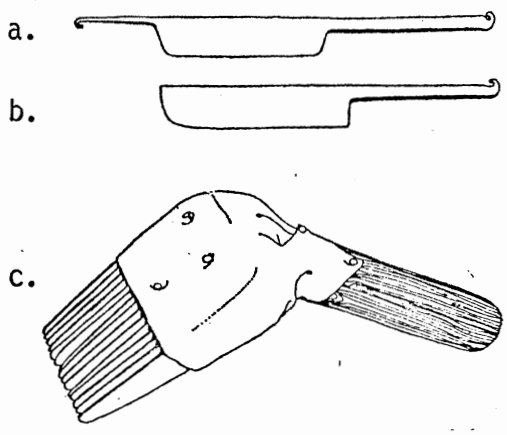


Figure 5. Mounting of Warp over a Rod

The Knotting

After a band of webbing has been formed by shooting the weft back and forth alternately over and under the taut warp threads (kilim, gilima, gilimbaf) across the whole breadth of the carpet, the first row of knotting is started: the knotter cuts a piece of yarn about 50 cm. long from the hanks hanging above her with a knife (tikh) that never leaves her hand while she is working. (Pre-cut yarns of this length are also usual.) She loops this yarn around two adjacent warp threads so as to make the right hand end protrude like a thumb, pulls the loop firmly downwards, and cuts off the yarn at the height of the projecting end. Her left hand is already busy with the next pair of threads to make the next knot. So the work goes on. An experienced knotter leaves the knots of another color and fills them in afterwards. In some regions there is a special knife for the Turkish

knot. It has a little hook at the point which holds the right hand warp thread and also pulls through the right half of the know (Tabriz knotting hook) (see Figure 6).




a. Knife with Tabriz Knotting Hook
b. Knife without Tabriz Knotting Hook
c. Comb (Daffeh, Daftun)

Figure 6. Tools Used in Knotting

The nomad knotter chooses the color of the wool by instinct, keeping the design in her head, or she finds her inspiration in a model carpet lying beside her. In factories there is a drawing of the pattern (nagzh). This is drawn out by the designers and every single knot is indicated. After each row of knots one or more wefts are woven

in. A comb-like instrument (daffeh or daftun) (Figure 6) beats the weft and the row of knots firmly downwards, and generally the ends of the knots are cut off with large scissors (gaichi) to the required height at the same time. If the shearing is left until the end of the day's work, then the tufts of wool are combed out hard after each row with an iron comb (chamed) to make the pattern plainer. The next row of knotting can then be proceeded with, followed again by weft threads, etc., until the carpet is finished off at the upper edge with a plain woven border (kilim).

The knots and sometimes even the weft are not taken to the very outermost pairs of warp threads. Before the warp is set up these are twisted together to make specially thick strands. To protect them they are wrapped thickly with wool, cotton, goat hair, or (very rarely) with silk of more colors (shirazi, shirasa) each time the weft turns.

The carpet is then taken down from the loom. The ends of the warp threads may be left as twisted loops or cut up, but they are usually knotted together. Many nomads plait them into cross bands or braids that can be knotted together into a net. In some regions they prefer the bands of webbing to form the edge and in some nomad tribes these are given pretty woven or embroidered patterns without a fringe (gabeh). Sometimes the plain woven band is turned back and hemmed down. Usually the upper end is finished differently from the bottom. Knotted pieces with tassels at the bottom end are not intended for the floor.

In the factories the grosser irregularities in the pile are levelled off by experienced master shearers (perdakhchi); these are craftsmen who enjoy much respect. At the final brushing of the carpet there

is a last check up and any irregularities are ironed out with steam. A new piece is only washed if it has been soiled. For export, certain carpets are always given a wash.

A good knotter can tie up to 1,000 knots an hour; with simple and familiar patterns or single colors, even more. The finer the knots and the more complicated the pattern, the slower the work. The cost of labor for a carpet with 3,000 knots per square cm. is thus more than double that for one of the same size with 1,500 knots.

As a rule, in the East it is women and girls who do the knotting, though boys and men sometimes do it too, especially in the factories in segregated halls. The romantic-seeming atmosphere of many workships (kar-haneh), with little children playing round the looms and lying in cradles, cannot disguise the fact that much use is made of child labor. They squat before their work with the seriousness of adults.

While the ten-year-old may lack practice and experience, the hands of the twelve-year-old fly over the warp with such speed that even the sharpest eye cannot distinguish the various phases of the process. The most important man in a workshop is the master knotter. He supervises the accurate and careful work on two or three looms, and himself puts in the correct knots in the important places for the pattern. He is in charge of the material for the knot, and it is still the custom for him to engage the personnel for his looms and to pay them according to their day's work.

# Fibers

## Wool

The materials used in Persian rugs are wool, cotton, and silk, though some tribes use goat or camel hair. The only material essential to the creation of Persian rugs is wool. Mountain wool is best. High altitude means fine wool and inferior art; low altitude means inferior wool and the superior art of the cities.[3]

Quality depends upon many factors. Sheep differ greatly in variety, age, health, and cleanliness. Grazing areas differ in altitude, climate, seasonal changes, and pasturage, all of which create vast differences in the wool of rugs. The section of the body from which the wool comes makes a difference, the finest being from the face, shoulders, and sides of the animal. Generally, 200 grades measure wool differences.[4]

For centuries the nomads have been using wool both for warp and weft threads. Iranian wool is produced from sheep of many colors, ranging from off-white to black through gradations of cream, yellow, and brown. These natural colors add considerably to the palette of the rug weaver.[5]

## Silk

When Kashmir was still a part of the Persian Empire, silk cloth of world renowned quality and highly imaginative design was being woven there. Carpet weavers eagerly grasped the opportunity to make carpets from silk, since this material offered possibilities for new

and more richly varied creations. Silk carpets soon became so highly prized that they replaced wool carpets in the residences of kings and emperors.

Newly spun silk thread is too soft for use in weaving carpets, so it is treated by extended immersion in boiling salt water to give it the desired degree of hardness. Salinity is provided by large pieces of rock salt which dissolve slowly in the boiling water while the silk is being treated. When the salt is completely dissolved, the silk is removed, rinsed in fresh running water, and then placed in the sun to dry. As it dries, the silk begins to harden.

According to the use for which it is intended, the silk threads are further spun or twisted together to form progressively heavier strands of varying thickness and strength. Strands of silk used in carpet weaving are generally made up of from seven to nine different single threads, each having a diameter of only a millimeter. Thus, ultimately some 72 separate fibers--each one individually spun by a silkworm--are wound together with the help of hand operated machines to provide the strong silk strands which are required for carpet weaving. The finer the weave of the silk carpet, the higher the number of revolutions required of these machines, and the tighter the "wind." In any case, both warp and weft are wound much more rapidly and strongly. Heavier strands are not only used for the warp and weft of pure silk carpets, but also for wool and cork carpets. These pieces often reach a knot density of 1,660,000 knots per square meter, and are very rare indeed.[6]

Cotton

Cotton is grown in Iran on a large scale. The fibers are of a rather short staple; however, they provide both warp and weft for many workshop rugs.

A cotton foundation makes the back of a rug firm and even, so the rug lies smoothly and flat on the floor. For some coarser rugs, hand-spun cotton is used since it is cheaper than the factory product. Sometimes, it is used for strong warp-threads in urban or workshop rugs.[7]

## Dyes

The fact that the west possesses dyeing techniques far in advance of those practiced by the Persian does not in the least imply that western methods should be adopted in the Persian carpet industry. That would be, indeed, deplorable; not only because western dyes are unsuited for the purpose, but also because Persian dyestuffs, together with the ancient skills employed in their use, are an integral part of the makeup of the Persian carpet--as much a part of it as the wools, the weave, and the design--and to discard one of these fundamental elements is to upset the balance of the whole. Unhappily, the use of western dyes is increasing rapidly in Persia. It is proper, therefore, to state here what they are and why their adoption would be a disaster for the industry.

Imported dyestuffs may be conveniently divided into two categories, which differ widely in merit and in methods of application: (a) the cheap acid or basic dyes, which are known in Persia under the

generic (though not strictly scientific) term "anilines"; and (b) the much superior synthetic dyes, which are generally mordanted with potassium bichromate, and are known under the generic term "chrome dyes." The former are cheap, easy to use, and fugitive. The shades to which they fade on exposure to light are generally villainous. When washed with alkalis some of them almost disappear. Chrome dyes, on the other hand, are expensive and considerable technical skill is required for their correct application. If properly applied, they are extremely fast.

## The So-Called Aniline Dyes

The disaster effect upon the carpet industry of the introduction of cheap foreign dyes has occupied the attention of the Persian authorities for many years. As far back as the 90's of the last century, Nasir-ud-din Shah, who was, in his way, a patron of the arts, took steps to prevent it. His decree was repeated, with further elaboration, by his successor, Muzaffar-ud-din Shah in 1900. These decrees went so far as to order the destruction of all "aniline" dyestuffs and the confiscation of all carpets made with aniline dye yarns. The first of the two penalties was carried out for the time; and still continue, at least nominally, in force. The second remained a dead letter. Some 25 years ago the decree was modified; in place of confiscation, all carpet proved to contain aniline were subjected to an export tax of three percent. The revenue which accrued was to be employed in research connected with the dyeing process. Unfortunately, however, the Ministry of Finance discovered in the decree a new,

convenient, and lucrative source of revenue. The export tax was raised from three to nine percent, and later to 12 percent, and research was forgotten.

In spite of these restrictive ordinances, the importation of cheap European dyes continued on an ascending scale. This is hardly surprising in view of the profitable nature of the trade and the length and remoteness of the Persian frontier. No doubt the Persian custom officials of those days allowed themselves to benefit from the hopelessness of their task, on the legitimate ground that the stuff would come into the country anyway.

These dyewares are, indeed, an ideal commodity for contraband operations; for a little goes a very long way. They are used in strengths of only one-half to one percent of the weight of the yarn. Thus, 200 pounds of aniline is sufficient to dye over 20,000 pounds of yarn, which is enough to weave 250 12/9 feet of carpet--providing all the yarn in the carpet is aniline dyed. As, however, it is unusual for more than 10 percent of the yarn in a Persian carpet to be dyed with aniline, the 200 pounds of dyestuff would be enough for 2,500 carpets! Thus, the bazaar merchants are able to sell their dyes in small quantities to the villagers, and to make a very good thing out of the traffic.

The principal shades for which aniline are used are the reds, because madder--the traditional dyestuff of the Persian dyers for red shades--is a tricky and expensive dyestuff, and is sometimes difficult to obtain. Furthermore, the task of dyeing with it is usually assigned to the local dyers--who have to be paid; whereas, the

cottager can boil a little aniline red himself and dye his yarn in his own pot over his own fire.

For their browns and yellows, on the other hand, the Persian weavers employ their own dyestuffs--walnut husks, oak bark, pomegranate rind, straw, vine leaves, and weld--instead of anilines; because many of these dyestuffs can be had for nothing or for very little. There is no inducement, therefore, to use anilines instead.

The inconsequence with which some villagers abandon their native dyes for anilines may appear surprising, for they know very well that these dyes are condemned by their customers in the bazaar. They use them because they are cheap. Fortunately for the carpet industry, they have remained generally faithful to their blues, because acid blues are among the worst of the cheap dyestuffs. Had acid blues been adopted in place of indigo or anything like the scale in which acid reds have replaced madder, the knell of the carpet industry in Persia would have sounded. Since World War II there has been a tendency in a few areas to use an imported acid black in place of dark blue (indigo); and in a few other areas the range of aniline colors in common use has widened. The problem is thus becoming more serious and less tractable. This may be due--at least in some measure--to the fact that cheap, imported dyes are needed in the production of textile fabric which Persia is beginning to produce. Permission was given to her industrialists and merchants to import these dyes under special license, but once this was done the whole protective system broke down. A new approach to the problem of the use of anilines in carpets is therefore called for.[8]

## Synthetic Chrome Dyes

The second of the two main categories of imported dyestuffs is the synthetic dyes, usually mordanted with potassium bichromate, and thus commonly known as "chrome dyes." They are generally fast to light and to washing with alkalis. The more important dye manufacturers have submitted samples of their products to the Persian government for testing. Following these tests, many of their dyestuffs are admitted into the country.

If fastness were the sole criterion of excellence, a case might be made for the use of imported synthetic chrome dyestuffs in Persian carpets. But there is such a thing as a dyestuff which is too fast.

The great merit of the native dyes of Persia and of the technique of the Persian dyes is that together they produce shades which lose something of their intensity by oxidation. Thus, either by the slow passage of time or the swifter agency of alkalis, the colors are softened and blended. It is this slight softening which produced the mellow tones in old Persian carpets. The virtue, indeed, of the Persian system of dyeing lies in its imperfection.

## The Natural Dyestuffs of Persia

The most important dye is madder (runas); for it was, until recent years, almost the only dyestuff in use in northwest Persia for dyeing all the shades of red and rose. Madder has been used as a dyestuff in the countries of the Near East as far back as written history goes. It grows wild in many parts of Persia, particularly

in the Yezd, Kerman, and Mazanderan provinces, where it is also cultivated. The principal market for it is Yezd.

The madder plant (Rubia tinctorium) is a perennial which grows to a height of several feet. It has a yellow-green flower and a thick, pulpy root which sometimes reaches a depth of six feet. The root is saturated with a liquid which possesses the property of absorbing oxygen and converting it into a red dyestuff. The dye is found in the root only.

The root has little tinctorial value before its third year. From that time on it increases in strength until the seventh year. After the ninth year it has no further commercial use. The roots are pulled up in October or November, dried, beaten with a flail, and ground to a coarse powder. Users, however, prefer to grind the roots themselves because powdered madder can be easily adulterated.

The dyeing process commonly used in Persia is as follows:

1. The yarn is first scoured in hot water for half an hour. If it is greasy, three percent of carbonate of soda with a little soap is added.

2. It is then steeped for 12 hours in a cold alum bath (one pound of yarn to one-fourth pound of alum, by weight). A second alum bath is then prepared, and the operation is repeated; or, the second 12 hour steeping may be replaced by boiling for one hour in the alum bath.

3. The madder vat is prepared by boiling finely sifted madder of equal weight with the yarn to be dyed in a small quantity of water, until the coloring madder is dissolved out of the root. The scum is then removed from the liquor and water is added, according to the

depth of the shade required. The mordanted yarn is then placed in the vat, which is again brought to a boil. After boiling for 30 minutes, a small quantity of the juice of sour grapes is added. The yarn is then boiled for another hour (making one and one-half hours in all). It is then allowed to steep in the cooling liquor for 12 hours. Finally, it is thoroughly rinsed, preferably in a running stream.

The Mehriban (Hamadan) villagers have a peculiar method of dyeing with madder which they share with their neighbors in Bijar. The yarn is first steeped for three days (in sunlight) in a bath of dugh (whey) and alum. It is then washed thoroughly and afterwards boiled in a madder pot. When the dyestuff has been absorbed, the yarn is withdrawn. Water and cow urine is then added to the liquor, and the yarn is replaced for about 15 minutes. It is then scoured and hung in the sun to dry.

The well known Dughi rose of Arak (Sultanabad) is dyed in the following manner: After mordanting with alum the yarn is steeped for two days in a bath of finely ground madder and whey (dugh). When it emerges from the bath it is orange in color. It is then scoured for 24 to 48 hours in running water. This gives the rose a characteristic bluish tinge which is probably produced by the precipitation on the yarn of a calcium salt of madder.

Another method in use in Arak consists in steeping the yarn for five days (after mordanting with alum) in a bath of madder and whey, and afterwards exposing it to the sunlight for some hours. This induces a fermentation which fixes the dyestuff. Both these processes are more picturesque than effective, as the rose which they produce is fugitive to alkalis.

Weld (Reseda lutuola-Pers. Isparak) is a thin, delicate plant which grows wild in many parts of Persia and is cultivated in Khurasan. Its stalks, leaves, and flowers yield a yellow dye which is used alone and in combination with other dyestuffs for dyeing carpet yarns. A variety of beautiful greens are obtained by dyeing the yarns first with weld and afterwards with indigo.

The dyeing process is as follows: The yarn is mordanted by boiling for an hour in an alum bath (one pound of yarn to one and one-fourth pound of alum). The weld (which is broken up into small pieces) is first boiled for an hour and the liquor is then poured slowly into the vat containing the mordanted yarn, and is brought almost to a boil. The vat is kept at about this temperature for an hour. The yarn is then allowed to steep in the cooling liquor for 12 hours. The quantity of weld used varies from 5 to 40 percent of the weight of the yarn, in accordance with the depth of color required.

Vine leaves (Pers. Barg-i-mo) are also used extensively in Persia for dyeing yellow--they produce a brighter, less delicate shade than weld. The dyeing process is the same.

Pomegranate rind (Pers. Pust-i-anar) is another dyestuff which is much used for yellows; it is plentiful and cheap. It is fast, but produces a rather muddy yellow--less attractive than either weld or vine leaves. The same method of dyeing is used as with the other two.

Walnut husks (Pers. Pust-i-gerdu) are unrivaled for producing beautiful shades of camel and brown. The dyers are, unfortunately, in the habit of steeping the yarn for two or three days in lime water before mordanting--a wholly unnecessary procedure if the yarn is

properly scoured. After the lime treatment the yarn is washed in running water. It is then mordanted with alum, as described above for weld and vine leaves. The mordanted yarn is then boiled for one and one-half hours in a vat containing from one-quarter to one-third its weight of walnut husks. A great variety of beautiful shades are produced by combining walnut husks with madder weld and other dyestuffs.

Oak bark (Pers. Jaft) comes from Lurestan and is used in the Hamadan area and in Kurdistan for dyeing browns. Its use for this purpose is not as widespread as walnut husks. It is mordanted with alum in the same ways as other Persian dyestuffs.

FOOTNOTES

[1]Iran Farsh, Persian Carpets (Iran, 1974), p. 124.

[2]Ibid., p. 146.

[3]Arthur U. Dilley, Oriental Rugs and Carpets (Philadelphia, 1959), p. 238.

[4]Ibid., p. 240.

[5]Preben Liebetrau, Oriental Rugs in Color (New York, 1962), p. 24.

[6]Seied M. Ghaleh, Persian Rugs, Vol. I (Iran, 1975), p. 76.

[7]Preben Liebetrau, Oriental Rugs in Color (New York, 1962), p. 22.

[8]Seied M. Ghaleh, Persian Rugs, Vol. III (Iran, 1975), p. 93.

# CHAPTER IV

## DESIGN OF PERSIAN RUGS

Persia has been described as the home of carpet design. There is more truth in this generalization than there is in most, for design--particularly carpet design--is a form of art for which the Persians possess peculiar gifts and understanding. Their instinct, indeed, is to formalize any subject or conception, to make of it a design or a planned pattern in accordance with accepted convention. They regard these conventions not as impeditive shackles but as diverting precepts which they have inherited from bygone generations and which they delight to observe. Only their greatest artists have dared to ignore them.

Persia has, of course, a far longer experience than the West in the art of carpet design. For carpets in the West are a comparatively modern refinement--they were not in general use in England before the nineteenth century; whereas, in Persia their beginnings are lost in the half-light of antiquity.

### The Two Orders of Persian Carpet Design

Persian carpet design falls naturally into two orders or styles which are distinct and instantly recognizable. They are: (1) the

rectilinear and (2) the curvilinear. The designs of the first category are built up out of three straight lines: the horizontal, which consists of a row of knots tied side by side; the vertical, which consists of a row of knots tied one above the other on a single pair of warp strings; and the diagonal, which consists of a row of knots tied successively one-up and one-along from an angle of about 45 degrees.

A "square" fabric (i.e., one in which the number of knots per inch, horizontally and vertically is the same), would produce a diagonal of exactly 45 degrees, whereas a fabric in which the number of vertical knots per inch outnumbered the horizontal would produce a diagonal of less than 45 degrees, and vice versa. Designs of the second or curvilinear order are made up of curved lines--though straight lines are generally introduced to mark off the borders. These two basic orders of design coincide in the main with the two basic types of Persian weaving: the tribal or village weaves, which are usually rectilinear, and the town or factory weaves, which are curvilinear.

The discrepancy between the two orders did not arise from chance. It is due to simple and inevitable causes: a tribal or village rug is almost invariably woven in straight lines because a design of this character can be woven direct, and does not necessarily demand a high standard of craftsmanship; nor does it require full size drawing by an experienced draftsman on scale paper, which, of course, the tribe or village cannot provide. The weaver of a curvilinear design, on the other hand, must be provided with a cartoon on which the design has been carefully and accurately plotted. Such cartoons can only be produced in town factories by skilled designers assisted by qualified

draftsmen and colorists; and the weaving of designs of this character calls for skilled weavers and close control by skilled technicians.

The weaving in the villages around Arak (Sultanabad) and Kerman is largely curvilinear; but production of these villagers partake of the character of urban weaves because (a) they are not spontaneous, but have spread outwards from the towns and (b) the carpets are woven from cartoons drawn and colored in the towns. Though woven in villages, they are really urban carpets.

The rectilinear is the more ancient of the two orders of design. The second, or curvilinear, order was probably not evolved before the end of the fifteenth century. Up to that time rugs, runners, and kellegis had been produced by nomadic tribes and villagers, either for their own use or for barter or sale in the bazaar; and it is doubtful if, for many generations, there had been any appreciable advance in craftsmanship. When princes like Shah Rukh of Herat (and perhaps his wife Jawar Shadh) or Uzun Hassan of Tabriz commissioned the painters of their courts to draw intricate floral and animal designs for large carpets, it is most unlikely that any of these villagers could be found to weave them. It became necessary, therefore, to devise a new technique for their production. The technique evolved consisted of drawing a cartoon of the design, enlarging it full size on squared paper--each square representing a knot. At first the position of each knot was marked by a pinhole, but before long the pinholes were replaced by dots in ink or pencil.

## Convention in Persian Carpet Design

In spite of the influence of western decorators and stylists, convention has maintained most of its sway over Persian carpet design. We are so accustomed, for instance, to see borders in Persian carpets that we overlook the tenacity and immutability of the border convention. Yet, carpets are produced in many countries, both in the East and West without borders (as in China). But no man has yet seen a Persian carpet without a border. For the Persians regard the border as a necessary framework to set off the ground pattern; their designers would maintain that without it the attention is distracted from a steady contemplation of the main design. The border, furthermore, must consist of a middle band which is the border proper, with one, two, or three narrow bands (or guards) on each side. The patterns of the middle band--floral, arabesque, or both--are broken up into cartouches, and should be a bold repeat, on a fairly large scale. In contrast, the pattern of the guards should be short and insignificant, in order not to detract from the importance of the middle band, which is the border proper.

The design of the field, which is the area enclosed within the border is equally bound by convention. The first and most important is balance: the left and right halves of the carpet must be identical, and in the majority of carpets the top half and the bottom half must also be the same. These conventions enable the spectator to appreciate the design of the carpet from either end, or from either side. The last, however, is not a rigid rule, as "drop" or one-way designs

(like the Vase carpet) are not uncommon. The force of convention in the designs of the field is manifested by the persistence, down the centuries, of a number of designs which are common to almost every weaving area. Although local peculiarities may affect their presentation, the designs are recognized and accepted by every Persian as a part of his daily life. Indeed, it is unusual to find a household in Persia without at least one carpet, rug, or strip in one or another of these designs on the floor. There are nine of them listed below in order of their prevalence:

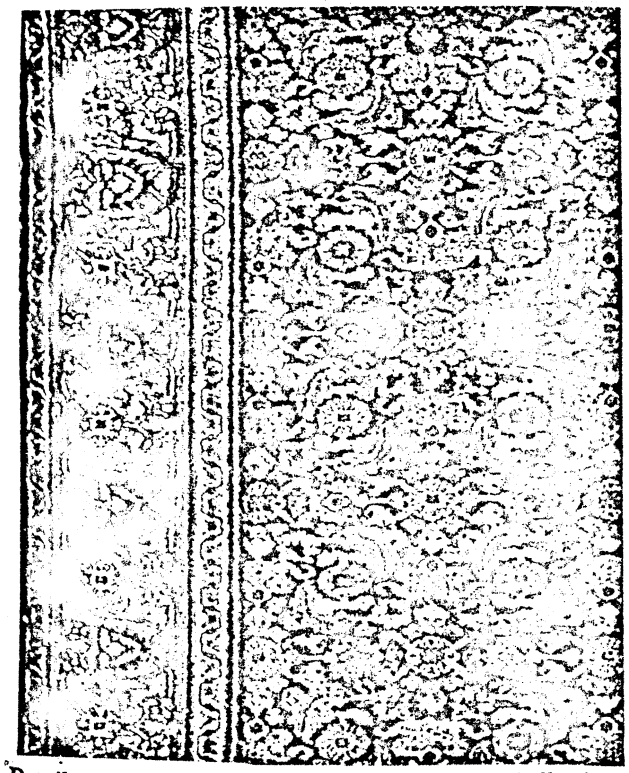
1. Herati: of Herat
2. Boteh (lit. a bush or cluster of leaves): the so-called pine or palm pattenrs
3. Harshang: the crab
4. Gol Henai: the Garden Balsam or Henna flower
5. Lechek Torunj: medallion and corner
6. Mina Khani: said to have been named after a certain Mina Khan of Tabriz
7. Shah Abbasi: of Shah Abbas
8. Bid Majnun: the Weeping Willow
9. Joshaqani: of Joshaqan

## Persian Carpet Patterns

### The Herati Pattern

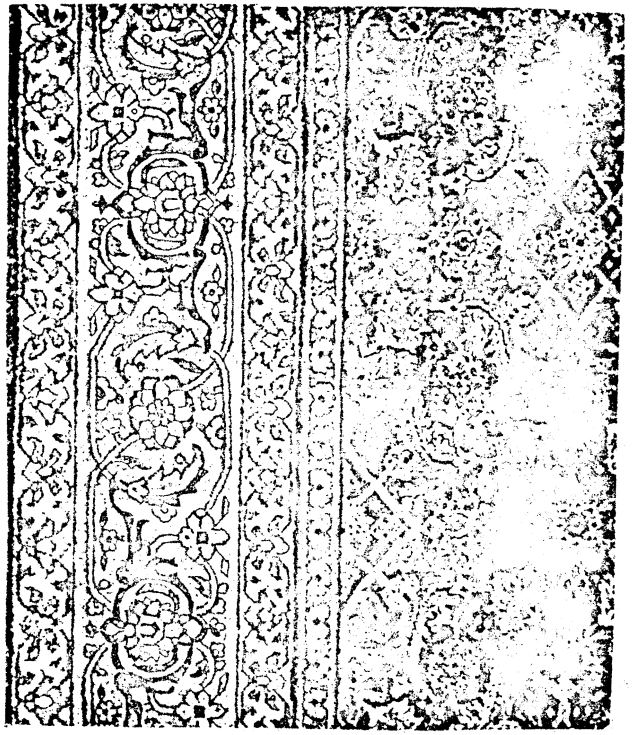
The most renowned and widespread pattern is the Herati (known also as Mahi or Fish pattern). The fame of this design is well deserved. When woven in a good quality fabric on a dark blue or cream ground, it

is among the most refined and elegant of the small repeating patterns of Persia which express the restraint and delicacy of Persian design. A well woven Herati has been described as the "gentleman's carpet." Although many hundred years old, it never is dated. The oldest example of it which we possess undoubtedly came from eastern Persia; we may accept the name Herati as an indication of its east Persian origin. This does not necessarily imply that these carpets were woven in the city of Herat (which, until 1857, was a Persian city and had been for a long period of Khurasan). For in Persia the name of a province is frequently confounded with the name of its chief city. Thus, the term Herati may have meant from Herat (province) and not from Herat (city); The Persians weave the Herati pattern in two different ways, as shown in Figure 7. The former which is the type more common in west Persia contains a well-defined diamond-shaped figure around which the four "fish" are arranged; the latter, which is encountered more frequently in Khurasan, does not. In Arak, where the design is most prevalent, it appears in thousands of medium priced carpets. It was in this province that the famous dark blue Ferehan carpets were woven in this pattern in the second half of the last century. The design is hardly less prevalent in the Hamadan villages, and three quarters of the output of Senneh is in the same pattern. It is also common in Tabriz, Meshed, the Qainat, Yezd, Bijar, and the Heriz area, and it is found even in the tribal rugs of the Baluchis and of Fars. It has long since crossed the borders of Persia to be reproduced in almost every country where pile carpets are made. Figure 8 depicts the rectilinear Herati design.



*Detail of a Qaīn carpet from the Shrine Collection, Meshed. This type of Herātī (without the "lozenge") is found only in Khūrasān.*

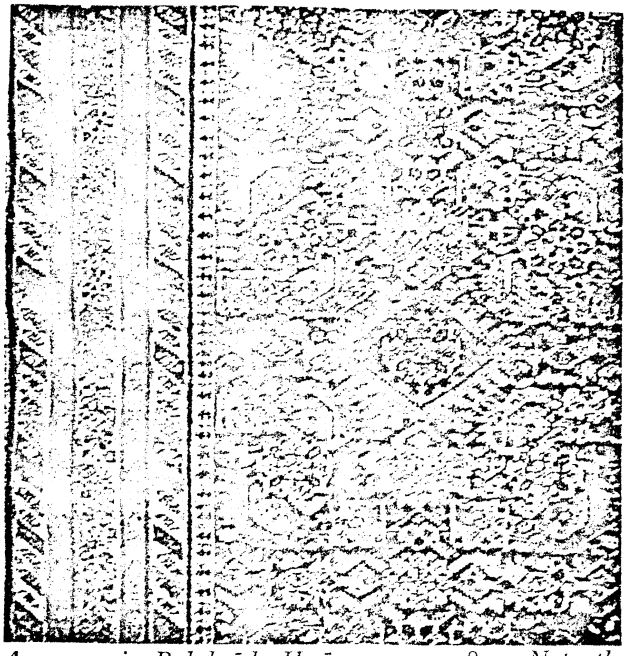
The Herati Design (Type 1)



*Detail of a Ferahān carpet. This type of Herātī (with the "lozenge") is common throughout Persia.*

The Herati Design (Type 2)

Figure 7. Herati Patterns



*As woven in Bakshaīsh, Herīz area; c.* 1890. *Note the serrations on the diamond, an uncommon feature.*

Figure 8. Herati Rectilinear Design

By convention, the Herati pattern is invariably combined with the so-called "Tosbagheh" or "Turtle" border. Although the figure which gives the border its name certainly suggests a turtle, the inhabitants of the semi-arid plateau of Persia could hardly have been familiar with this equaticreptile. Therefore, the origin of the figure may not be a turtle at all. In Tabriz the border is known as the "Samovar," which its principle motive closely resembles. The reader may take his choice of origins.

## The So-Called Pine Pattern and its Variation

The origin of the famous Persian Pine pattern has been for many years a subject of discussion among amateurs of the Persian carpet. It has been related to the Sacred Flame of Zoraster, to the pine, to the palm, to the almond, and to the pear; also to a leather purse and to the imprint of a closed fist upon a mud or plaster surface (which it closely resembles); and even to the loop made by the river Jumna on its way from the vale of Kashmir to the Indian plain! All these attributions appear to the author to be remote and rather fantastic. The explanation is, the author believes, much simpler. It is to be found in the name which the Persians give to the design. They call it boteh, which is their word for the cluster of leaves. It is, in fact, the Leaf design, and in its simplest form it closely resembles a serrated leaf. The Persians, with their passion for inventing intricate and artistic variations on a central theme, have produced a multiplicity of forms of the boteh, many of them have special names: Boteh Miri (small pine), Bote Termei (medium sized pine), Boteh Kharquai (large pine), Boteh Bademi (almond shaped pine), and Boteh Jequai (large pine with a small pine protruding from it).

There is no pattern (except perhaps the Herati) which, with its variation, is so widespread. In the Seraband area they weave nothing else, and it is common in the Hamadan villages. Occasional carpets are produced in Tabriz and in Kashan. A larger variation--the Boteh Kharqai--is woven in areas as far apart as Senneh and the Qainat. In Sarab (Heriz area) it is uncommon. Durring recent years the Qum

designers have created some new and interesting variations of it (Figures 9, 10). Finally, Kerman has produced the most graceful and ornamental of them all, derived, no doubt, from an earlier shawl pattern.

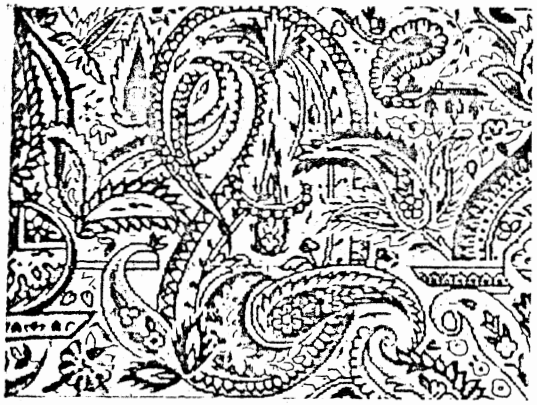
The most common type is the Boteh Mirl. This is the small pine pattern of the old Mir carpets and of the modern Serabands. Like the Herati, it has been copied in every country where carpets are produced--whether by hand or machine, and like the Herati it does not date.

The simpler types of the Boteh designs appear easy to produce. They are, in fact, among the most tricky of the commoner Persian patterns. An error in a single shade, a change in the position of a knot, will throw the pattern out of gear and rob the carpet of its gentility.

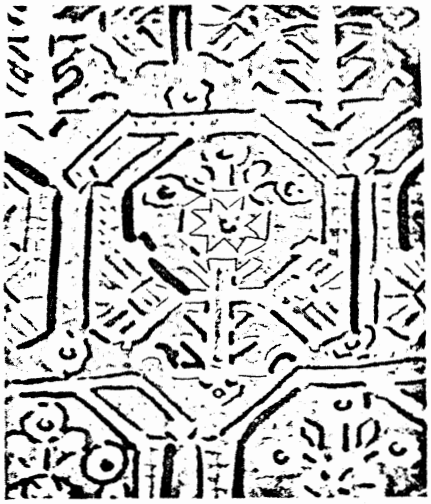
The Lechek Torunj Design

The medallion-and-corner design is typically Persian in its elegance and refinement. It was first used in the 15th century as a design for embossed leather book covers (Figure 11). In the 16th century the design was adapted for carpet weaving, and it has remained one of the standard types of Persian carpet design ever since.

There are many hundreds of different examples of it. Many of them display the extraordinary invention and high artistry of the best Persian designers. It might appear improper, therefore, to include among the nine more common Persian designs one which lends itself to such wide variations. It must be born in mind, however, that thousands of carpets have been produced during the last 50 years in the less



*Kermān*



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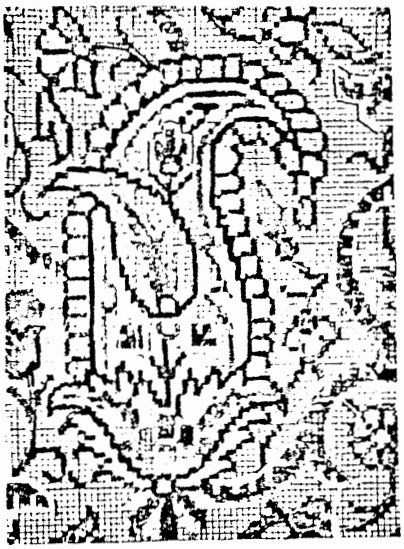
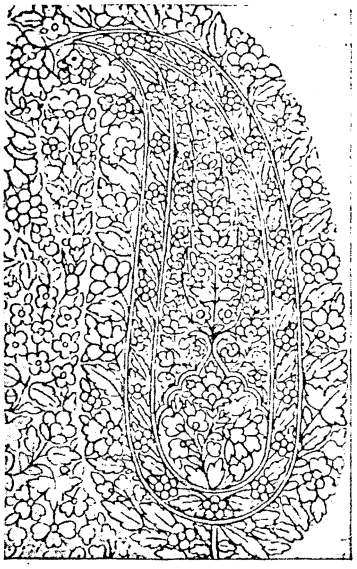


*Khūrasān*

*Kermān*

Figure 9. Variations of the Pine Pattern



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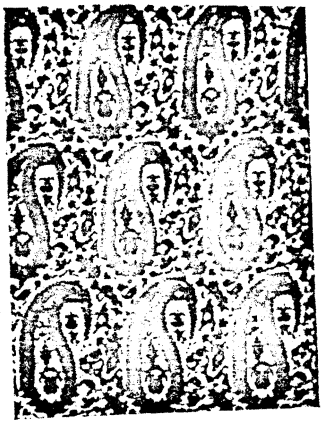
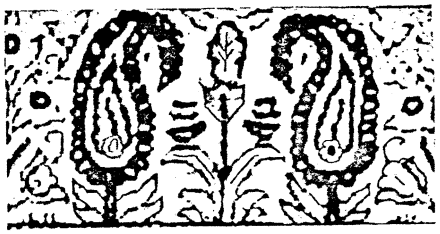
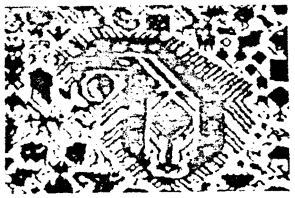


*Sarūk*



*Qūm*



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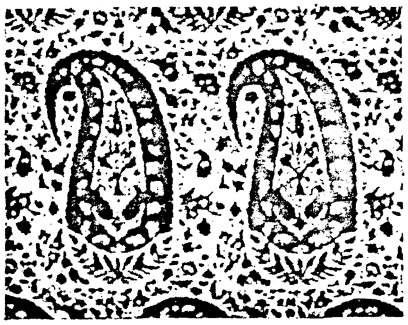
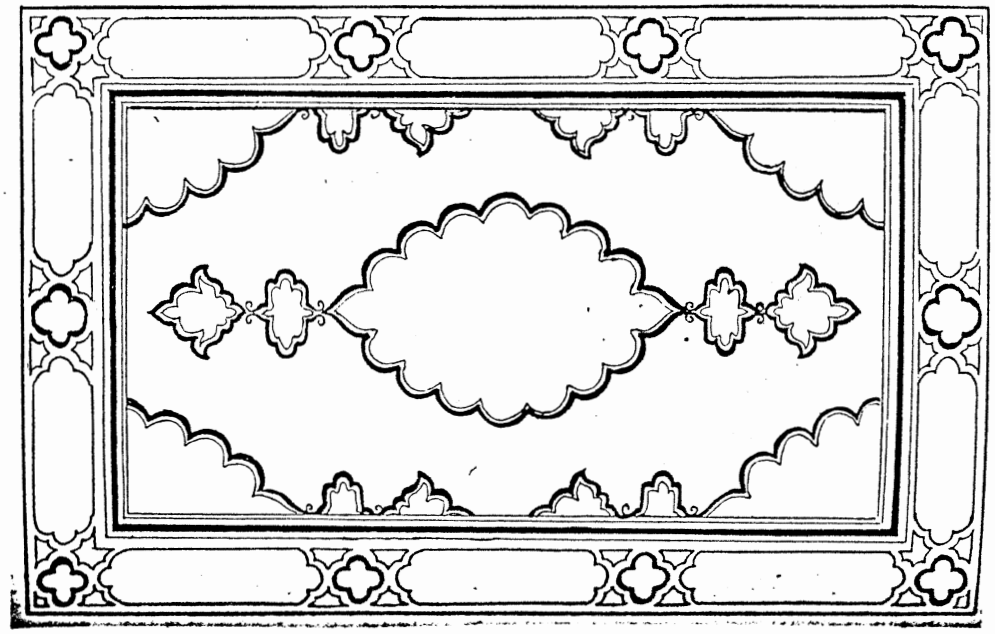


*Kermān*

Figure 10. Additional Variations of the Pine Pattern



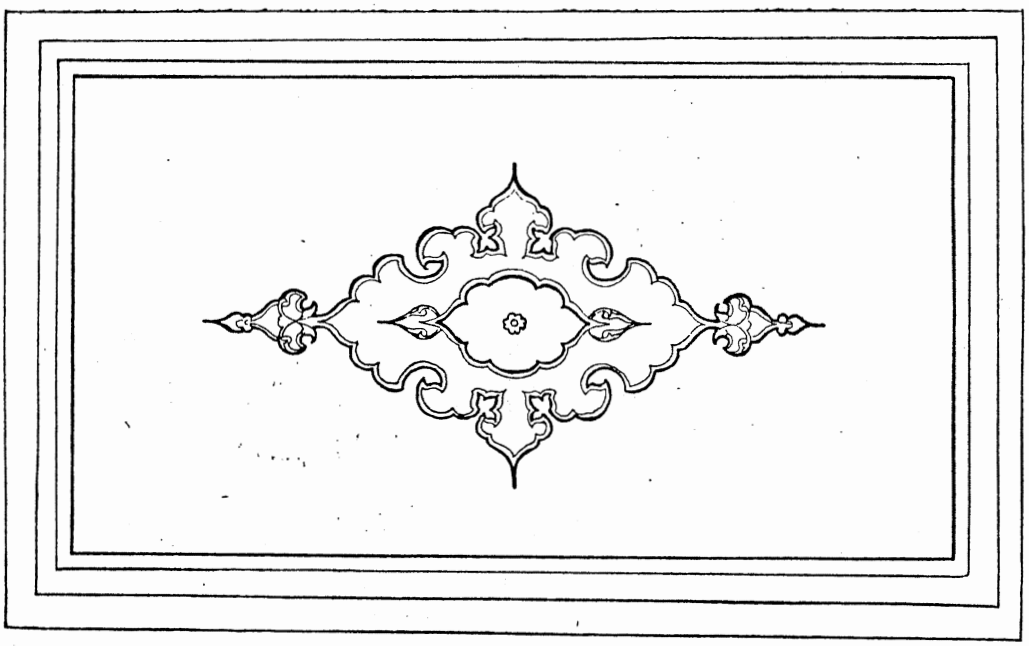


Figure 11. Outline Drawings of 15th Century Book Covers

complicated forms of this design--as, for instance--in the commoner types of Tabriz and Meshed carpets, and in the carpets of the Heriz area where it was converted from the curvilinear to the rectilinear style and has become the best known and most popular of the Heriz or Georavan designs.

In view of these considerations we are justified in including the medallion-and-corner design, as least in its simple forms, as one of the nine common and generally recognized types of Persian design. There are no prescribed proportions for the usual type of this design. Nevertheless, the Persians possess certain rules for which they like to apply whenever possible, because they know that these prescriptions, if followed, will produce a well proportioned carpet. (The rules could not, of course, be applied to carpets of unusual shape, such as square or long-and-narrow pieces). There are three rules:

1. The length of the torunj or orval part of the medallian (minus its two heads and necks) should equal one-third of the length of the whole carpet.

2. The width of the border should equal one-sixth of the carpet.

3. The sum of the widths of the guards (small borders) should equal the width of the middle or large border.

## The Mina Khani Design

This design (Figure 12) is said to have been named after a certain Mina Khan, a Tabrizi, who originated and popularized it. This explanation must be accepted with reserve because the design is older than the third quarter of the 19th century, when the Tabrizis began

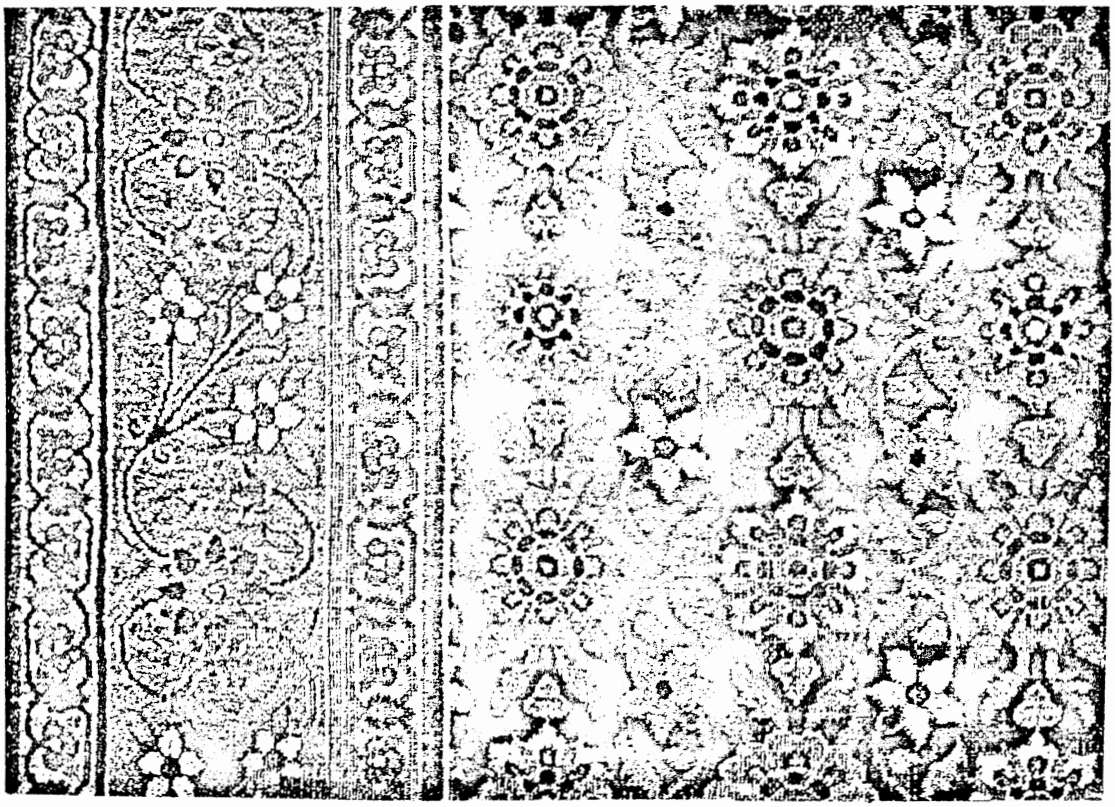


Figure 12. Detail of an Antique Carpet from the Qainat in the Mina Khani Design

to influence design in Persia. The design is more likely to be of Kurdish origin, as it is frequently found in old carpets from Saujbulagh and Bijar. The design, though monotonous, is effective; and because it possesses a comparatively small repeat, it is easy to weave. It has therefore become popular in many parts of Persia. Before the war it was the only design known to the weavers of Veramin--a fertile agricultural area south of Tehran. The villagers wove so many pieces in it--all alike--that they had difficulty in disposing of them. So they discarded the pattern for another which does not appear to have brought them any better luck than the first.

The Mina Khani design is one of the standard patterns used by the weavers of the so-called Mushkabad carpets of Arak. The master-weavers of Tabriz occasionally use it too and it appears from time to time in carpets from the Heriz'Hamadan and Chahar Mahal area.

The Shah Abbasi Design

The term Shah Abbasi is applied by the Persians to a type of all-over design composed of classical motives of the middle Sefavi period. These motives of the various types of palmettes, cloud-bands, halberds, vases, etc. were fixed for all time in the so-called "vase" carpets which (it is generally agreed) were woven during the reign of Shah Abbas. They appear in the field of the carpet, isolated from each other, evenly spaced and invariably combined and interconnected into a pattern by some form of stalk or trellis (Figure 13).

They are woven in every part of Persia. The designers of Kerman, Kashan, Tabriz, Isfahan, and Meshed love to draw their elaborate and varied beauties. In the villages, too, many of the weavers are

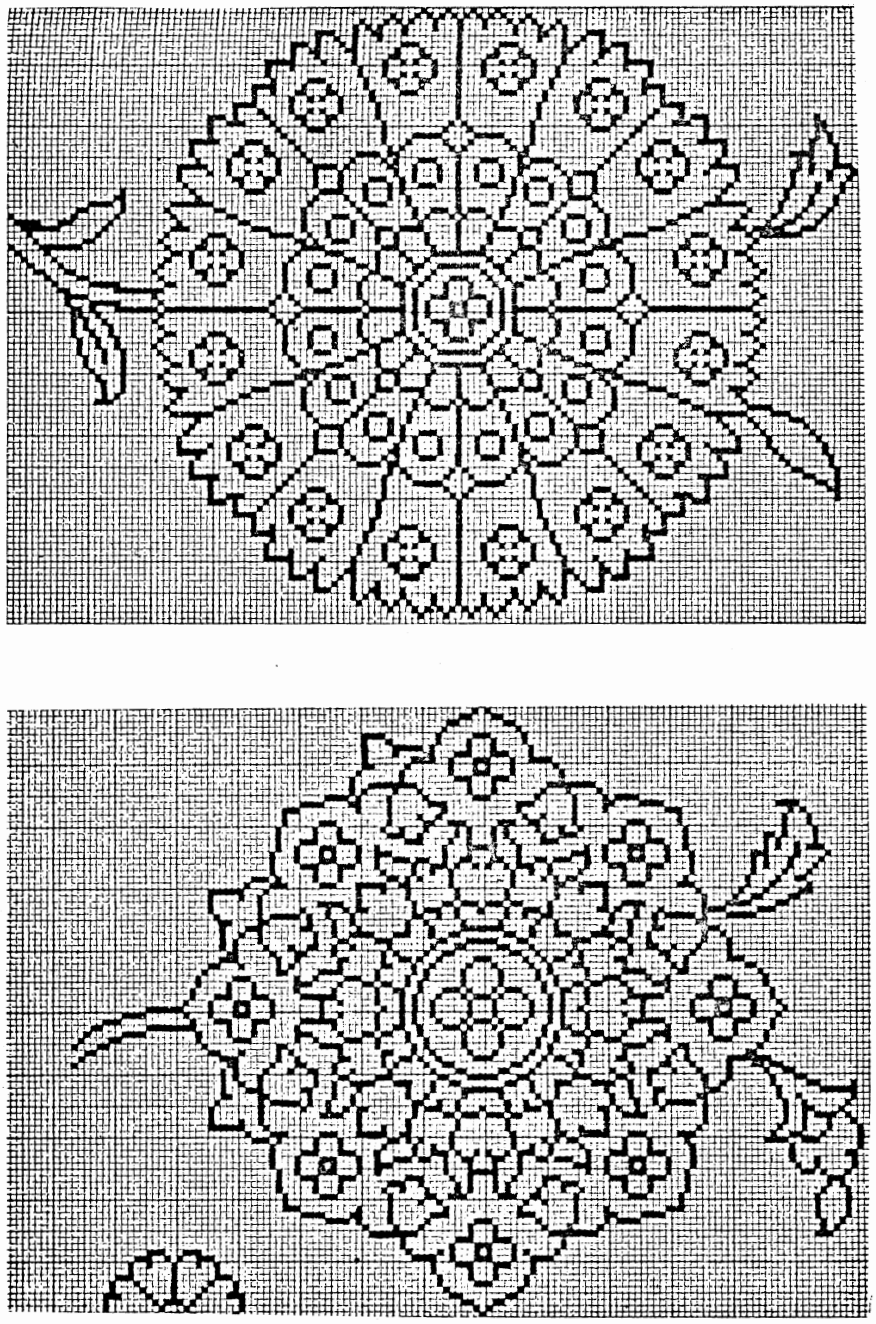


Figure 13. Shah Abbasi Motives of the Great Period of Classical Design

familiar with the more common palmettes and vases and often introduce them in simple, rectilinear form into their rugs and carpets. Figures 13 and 14 are drawings of most of the so-called Shah Abbasi motives of the great period of Persian classical design. They were drawn by Tahir Zadeh Bihzad of the Tehran School of Art. Their outstanding merit is their accuracy. At a time when traditional forms of beauty are being cast aside, it is well that accurate models of these motives should be preserved. For however much they may be neglected now, they will surely come into their own again.

The Bid Majnun Design

This is the weeping willow design (Figure 15), one of the most famous and attractive of the old Persian patterns. It is a combination of the weeping willow, cypress, poplar, and fruit trees, and it is so full of interest and character that it has been copied in every country where carpets are made. Its origin is obscure; but, like the Mina Khani, it is probably Kurdish, as the earliest examples which we possess of it are from the Bijar area.

The fact that the design is entirely rectilinear indicates that it is of tribal or village origin. Its prototype was never produced--like the designs of the great Sefavi carpets--by a designer at a drawing board. It was surely devised by a dusky village matron, looking intently, as she sat before her loom, at the willows, the cypresses, and the poplars in her garden while she wove them into a pattern for her carpet. The design was formerly widespread in northwest Persia, in Bijar, and in the Hamadan, Arak, and Malayer villages. It is less so now.

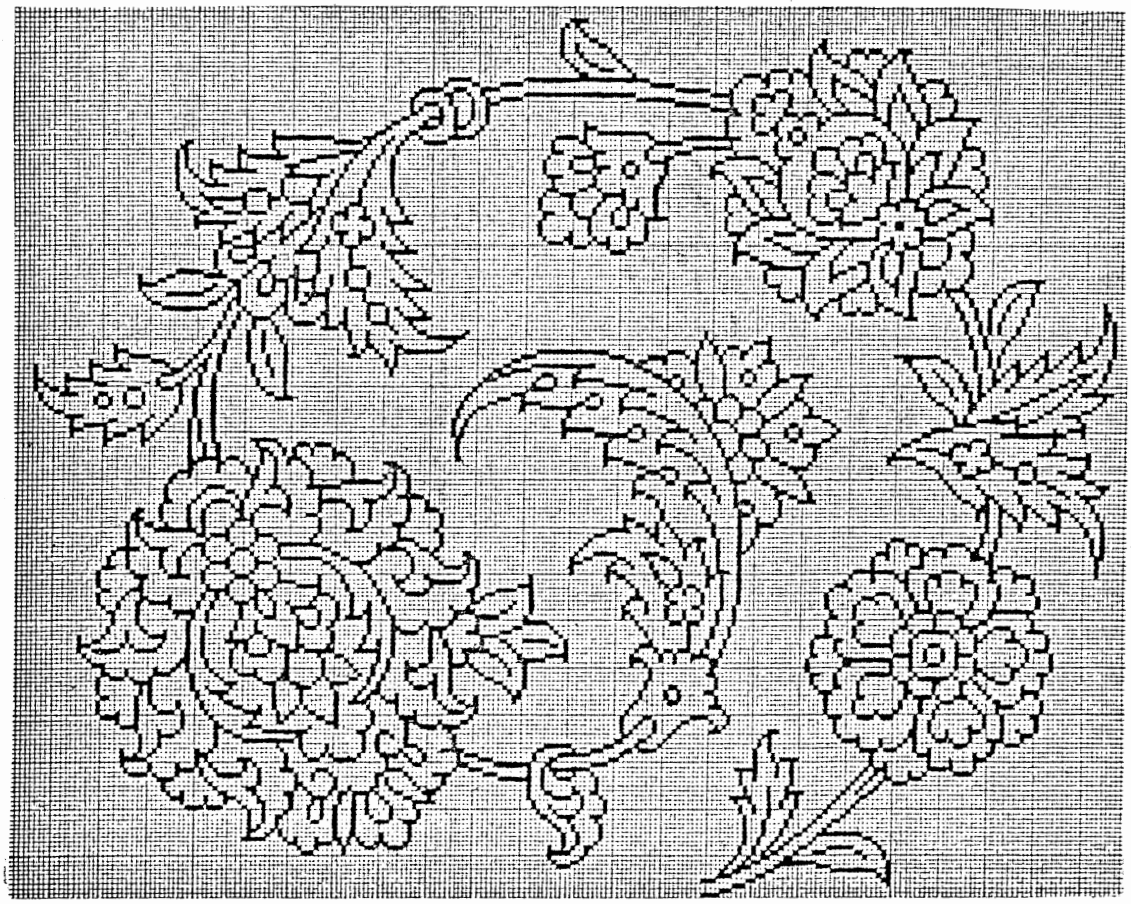


Figure 14. A Classic Motive Drawn by Tahir Zadeh Bihzad (c. 1945)

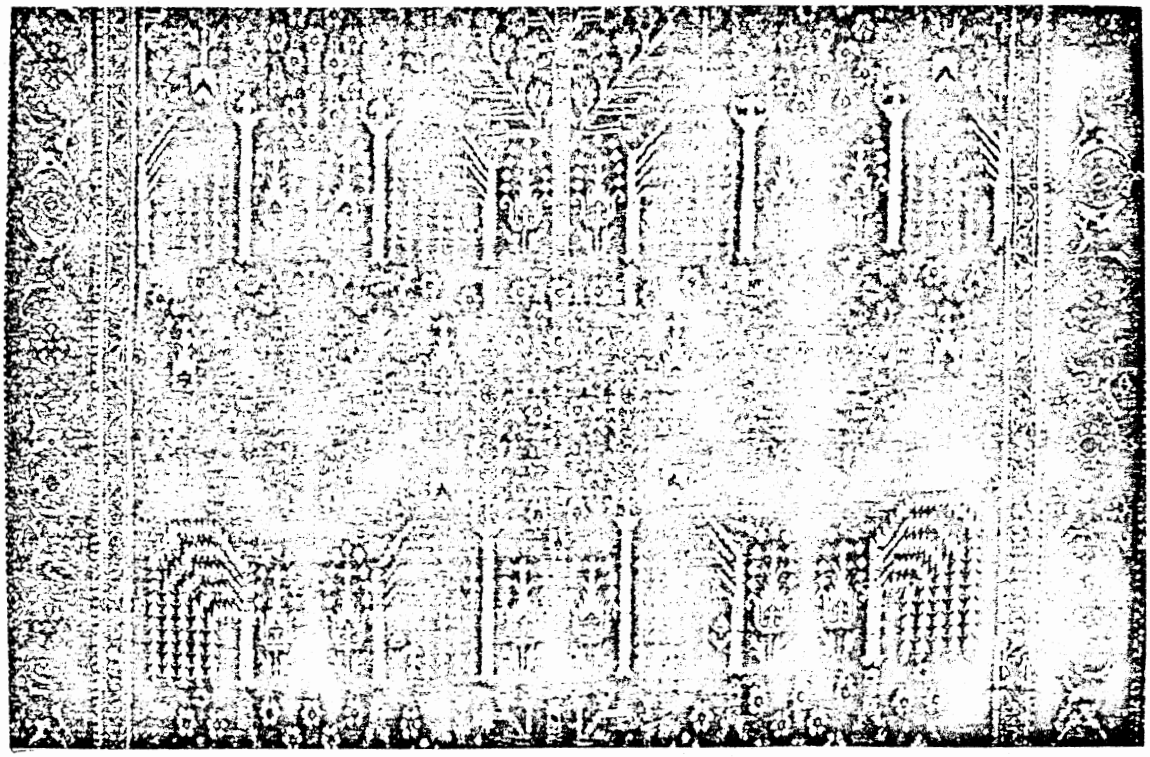


Figure 15. The Bid Majnun Design: Weeping Willow Pattern

The Tabrizis, however (those arch copyists), still weave it. It is rarely seen today in any of the Arak weaves. A rectilinear pattern is unsuited for a fine quality fabric; the design comes out too rigid and stiff. Hence, the Bid Majnun design is unknown in Kerman, Qum, and even in Meshed. It is, however, eminently suited to a medium or coarse fabric. Thus, in the days when the Ushak (Turkey) carpet was enjoying a deserved popularity, many thousands of carpets were produced in this pattern in Ushak.

The Harshang or Crab Design

The Harshang or Crab design (Figure 16) takes its name from its principal motive, which suggests a crab. Here we have a repeating pattern which is as widespread as the Mina Khani and the Bid Majnun designs. Yet we have no positive knowledge of its origin. It may be Turkish because it is common among the rugs of Karabagh, an area northeast of Tabriz on the Russian side of the border, and again among the Shirvan weaves of the south Caucasus. It is common, too, among the Turkish villages of the Heriz area and of Hamadan. The large oval motives, however, bear a certain resemblance to some of the palmettes of the Sefavi period, and the claws of the "crab" may be conventionalized arabesques. Perhaps its prototype was a curvilinear pattern drawn by one of the great Sefavi designers which the Turkish village weavers of Karabagh, of the south Caucasus and of Bakshaish attempted to reproduce--breaking up the curves into straight lines in the process--as they always did. Like the Bid Majnun the Crab design is a simple, well-balanced, rectilinear pattern, easy to weave and full of character.

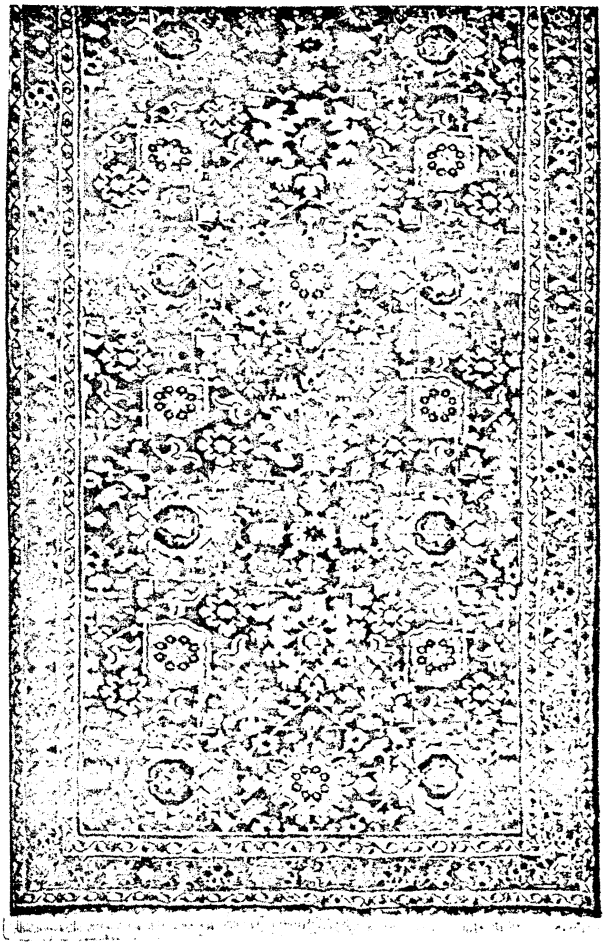


Figure 16. A Saujbulagh (Kurdistan) Kellegi in the "Crab" Design

The Gol Henai Pattern

Commentators have frequently stated that this small, repeating pattern is named after the Henna plant, which is does not greatly resemble. Gol henai is also used to denote the Garden Balsam, which the pattern does suggest (Figure 17). Although it is a well known pattern in Persia, it is not widespread. It appears to have originated in Arak (Sultanabad) and it is still one of the most common patterns used by the weavers of the Mushkabad and Mahal qualities. In the west the design is frequently called the chestnut pattern, because it recalls the blossom of the horse chestnut.

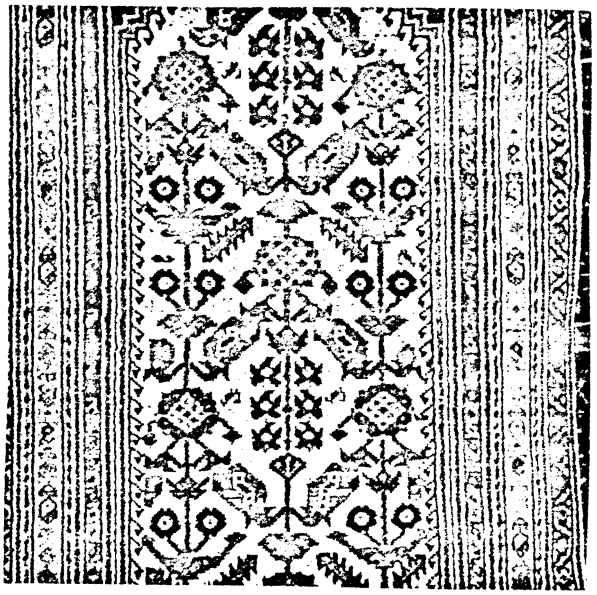


Figure 17. The Gol Henai Pattern

The Joshaqani Design

Two classic Joshaqani designs have been woven for at least two centuries (and probably for much longer) in the village of that name, and are still woven there. They are depicted in Figure 18. There are several variations: sometimes the medallion is omitted; sometimes the corner, and sometimes both. But the essential motives and the border have remained unchanged for many generations. Sometimes the design takes the form of a repetition of the corner lozenges over the whole of the field, sometimes with and sometimes without the diving lines.

It is a favorite design among the Persians. One meets it in the most unexpected places. The design is woven in Tabriz, in Hamaden, and occasionally in the Heriz area. It is practically unknown in Khurasan, Kerman, and Fars.

Students of Oriental art have often drawn attention to what is known as symbolism in carpet design. The term is used to describe the practice of introducing motives or figures in a carpet to represent an idea or some form of life or being. The author suggests that in respect to urban carpets this notion should be taken with more than a grain of salt. For the Persians are an artistic people who regard design as an end in itself. For them, a tree design, if well and truly drawn, is important and, in itself, sufficient. To call it a Tree of Life design is for them to give it a bogus significance.

The motives in Persian design are traceable either to concrete models such as a tree, a leaf, a flower or cluster of flowers, a

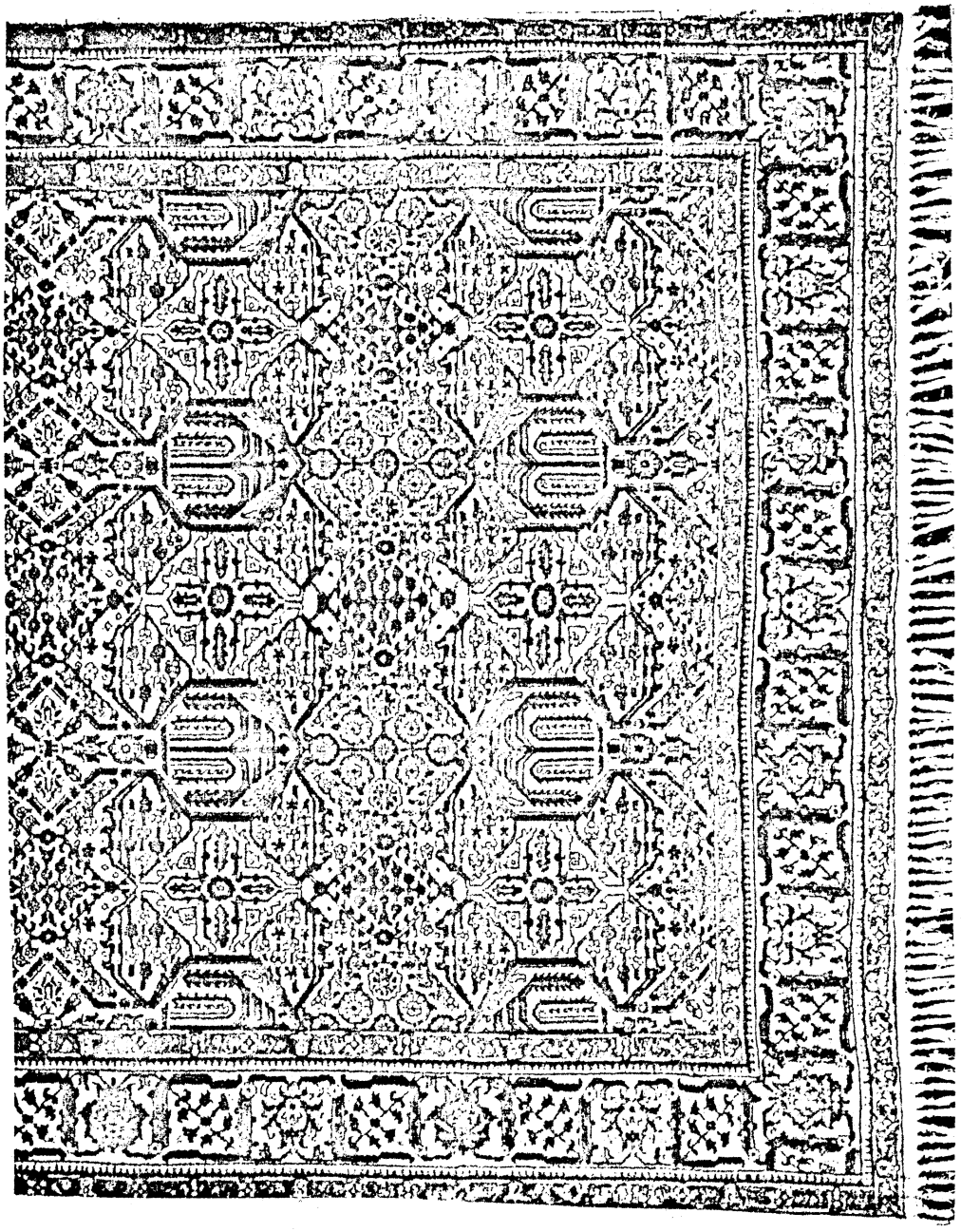


Figure 18. A Tabriz Carpet in the Joshaqani Design

bird, an animal, a vase, or to models which have been appropriated from foreign sources, mainly Chinese or Arab. With these the Persian designers have combined geometric or curvilinear forms to build their patterns. The fact that cloud-bands and birds of paradise sometimes appear does not mean that the Persian designers who appropriated these motives, accepted the mystical significance which they possessed in the country of their origin. The Persians took them because they liked them. The end which they had in view was delight through symmetry and beauty. There is little reference to symbolism in carpet design.

It is suggested, therefore, that caution is indicated in our approach to these matters. A tribal weaver, as she crouches over her horizontal loom, is more likely to seek inspiration from what she sees than from what she thinks.

## Hadji Abbas Karbassion

Haji Abbas Karbassion is one of the most accomplished carpet designers of our time. He is called Hadji because he has made the long pilgrimage to the Kabeh, holy sanctuary of the Mohammedans at Mecca. It is a tenet of the Islamic faith that this pilgrimage be made by every believer who can afford to do so and support his family in his absence. Here we see Hadji Karbassion at work in his studio at the Plaza of Kings where he develops his patterns for Persian carpets. Taking pencil in hand, he moves it over the paper in a light, flowing motion, and then, almost as if by a miracle, there appear trees, birds, flowers, and even a river. A few more lines are added, and

suddenly the sketch of a new carpet design lies before him. It is Hadji Karbassion's opinion that the carpet designs of recent years have been of exceptional quality, and that much has been restored to this art that had hitherto fallen into neglect. Most all of the carpet weavers serve by appointment of the Shah of Karbassion designs. These patterns are specially developed for silk and Kirgiz wool carpets and are woven to a degree of fineness of more than one million knots per square meter, and in some cases, in excess of 1,660,000 knots per square meter. The most difficult things about weaving these carpets is the placement of knots so that the right colors appear in the completed carpet motif. Most carpet designers have, so to speak, inherited their profession--their skills and techniques--from their fathers and forefathers.

The First Assistant to Hadji Karbassian

Hadji Abbas Karbassian is the highly gifted creator of unique and inspired designs. He develops his patterns in the form of sketches, most often as black and white line drawings. His first assistant then reworks the material, fitting together segmental variations in them in accordance with Karbassian's basic pattern. With paints and brush he then adds emphasis and accent to flesh out the design. Quite often he will paint in the first basic colors so that both the arrangement and distribution of colors, as well as the knot density and fineness of weave, can be determined at this stage of pattern development. The amounts and relative strengths of the various shades of yarn, and the nature of warp and weft can also be

ascertained. Although these estimates are not produced by mathematical operating, they have nevertheless proved consistently accurate because they reflect years of experience and an inherent "feel" for the work.

### The Second Assistant to Hadji Karbassion

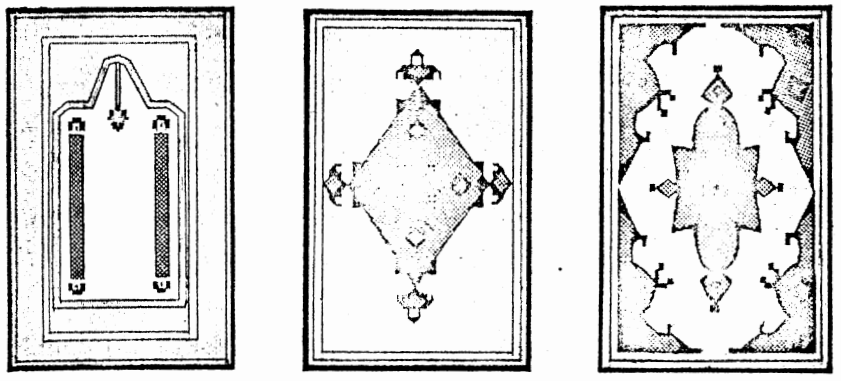
Hadji Karbassion's second assistant puts the final touches on the designs. This means completing all the details and filling in the colors on each element of the pattern. His works demand an almost intuitive sense of color coordination together with the finely honed skills of a master draftsman. A great deal of time and effort is required just to make the design for a carpet.[1]

## Symbolic Patterns

Pattern and color arrangements embody the individual characteristics of their makers (see Figure 19). Without being too exact, one can divide the patterns into the following basic types:

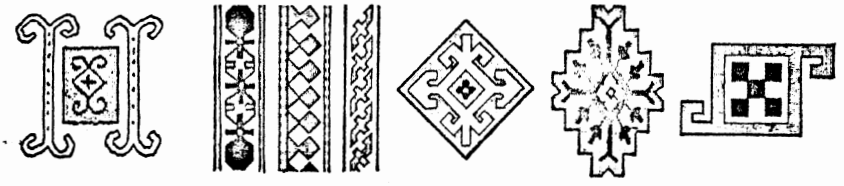
### Prayer Rugs

Prayer rugs are small rugs, easily portable, on which the owner prays outside mosques and on journeys. The main pattern is the prayer niche (Mihrab). This gable-like arrangement of right angles is usually either pointed at the top or dome-shaped. Often a hanging lamp, jug, or bunch of flowers is suspended from the gable. Prayer rugs are to be found in most Anatolion groups.

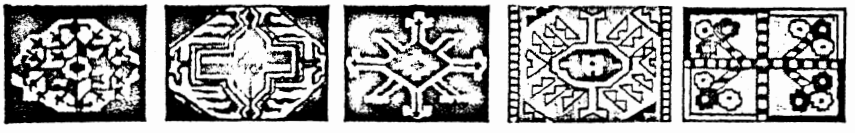


Prayer Medallion Medallion with corner wedges

vase animal Flower arbor vitae



Caucasian designs



Turkoman designs

Figure 19. Basic Pattern Designs

## Carpet with Medallion Pattern

The medallion is evident in many carpets originating from Anatolia and Persia. On some carpets it covers the whole center field. On the medallion there are smaller characteristic attachments which protrude into the center field. Sometimes there are also corner wedges. The shape of the medallion varies. Sometimes it may take the form of a multipointed star, sometimes of an oval, or sometimes it is almost round.

## Vase Carpets

The vase is an old renowned motif. It characterizes whole groups of carpets. Small vases with flowers or several larger vases form the main motif on the vase carpet. The remaining space is covered with palmettes and stylized flowers or birds. Vase carpets are found mainly near Kashan, Kerman, and Ghoom.

## Animal Carpets

These often depict animals of all kinds in grotesque shapes and attitudes: lions and panthers, steers and hogs, stags and hares, monkeys and birds, and many other beasts. They depict complete hunting scenes with hunters on foot and on horseback, and all the animals of the chase, the singular abundance which is characteristic of the hunting carpets.

## Patterns and Locations

### Senneh

This carpet comes from the town of Senneh in northwest Iran. The best specimens are of such fine texture and originality and the patterns are so rich in color that they cannot be surpassed by any other Persian carpets. On account of the fineness of its knotting, the Senneh is very thin. It is closely shorn and the wool is only slightly glossy. For over 200 years the Senneh has kept its style in pattern and color, uninfluenced by Western fashion.

The ground color of a Senneh is usually blue, but it can be red or ivory. The design usually seen on the older Senneh is the leaf pattern (botehmiri). The ground is closely patterned with many small, inconspicuous separate motives, but the main pattern stands out clearly. Usually, the Herati pattern is worked on an ivory or red ground, with a dark blue medallion. Areas of a single color are not to be found on the Senneh carpets. The colors are so balanced that no one color is really outstanding. Subdued, soft color tones are typical of the Senneh. Figure 20 depicts a Senneh with typical boteh miri pattern, arranged in rows. It is closely patterned with a small, fine design of stylized flowers, which makes it easily recognizable.

### Shiraz

This name is misleading. Though they sell this carpet in the town of Shiraz, it is not made there. Nomadic tribes or the surrounding country bring these carpets, which are made in the province of Farse, in great caravans to the town. As a rule, they are only small

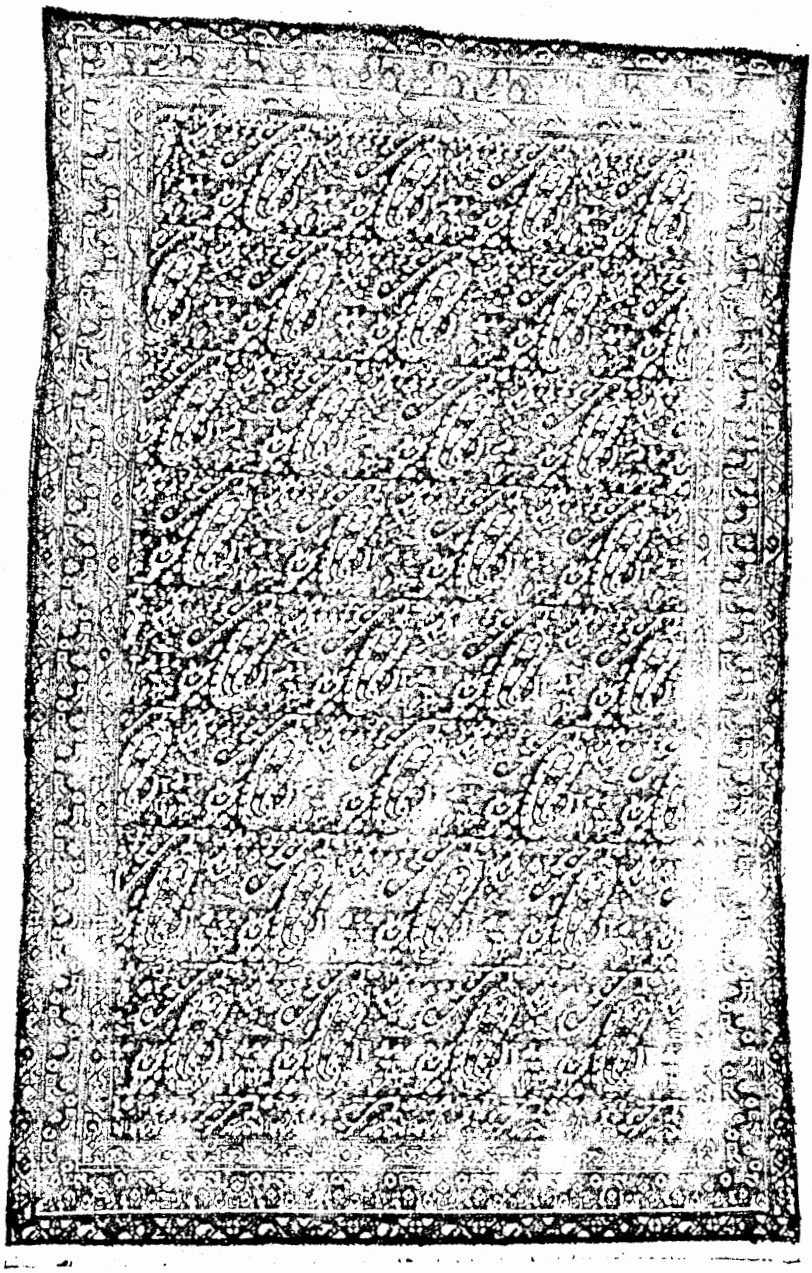


Figure 20. Senneh with Typical Boteh Miri Pattern

and medium-sized carpets. The background is almost always dark blue, with some red and a little ivory, but all other colors can be found in the patterning. There are usually two or three rhombs in the pattern, which is always rectilinear. These rhombs are decorated with hooks. The border is composed of many small strips and these are patterned with stylized geometrical flowers, leaves, and figures. A special feature of the Shiraz is the extraordinarily soft, silky, glossy wool with which is is knotted. For this reason it soon gets ragged-looking. Colored fingers, formed by the woolen warp threads, are also a typical feature. They can be clearly seen in Figure 21. Valuable specimens of the Shiraz carpet are commonly known as Mecca Shiraz, though this name has no connection with the town of the same name.

Kerman

The Kerman is perhaps the most beautiful and elegant of all Oriental carpets. Because of its patterns and light colors, it is very popular as a drawing-room carpet. It is very tightly knotted of fine, glossy wool of the best quality, which sometimes has the appearance of silk. The underside is so neatly finished that it is equal to the upper side. The principle color of a Kerman is ivory, and the delicate colors of the pattern give an airy effect. A special feature of the Kerman is that the same motif, i.e., a flower of one color, is arranged side by side with another of a different shade of that color; thus, the same flower is worked in pink and light pink, in pale blue and still paler blue. The pattern often bears a medallion with corner designs, or the background is patterned all over with flowers, trees, vases, figures, and arabesques.

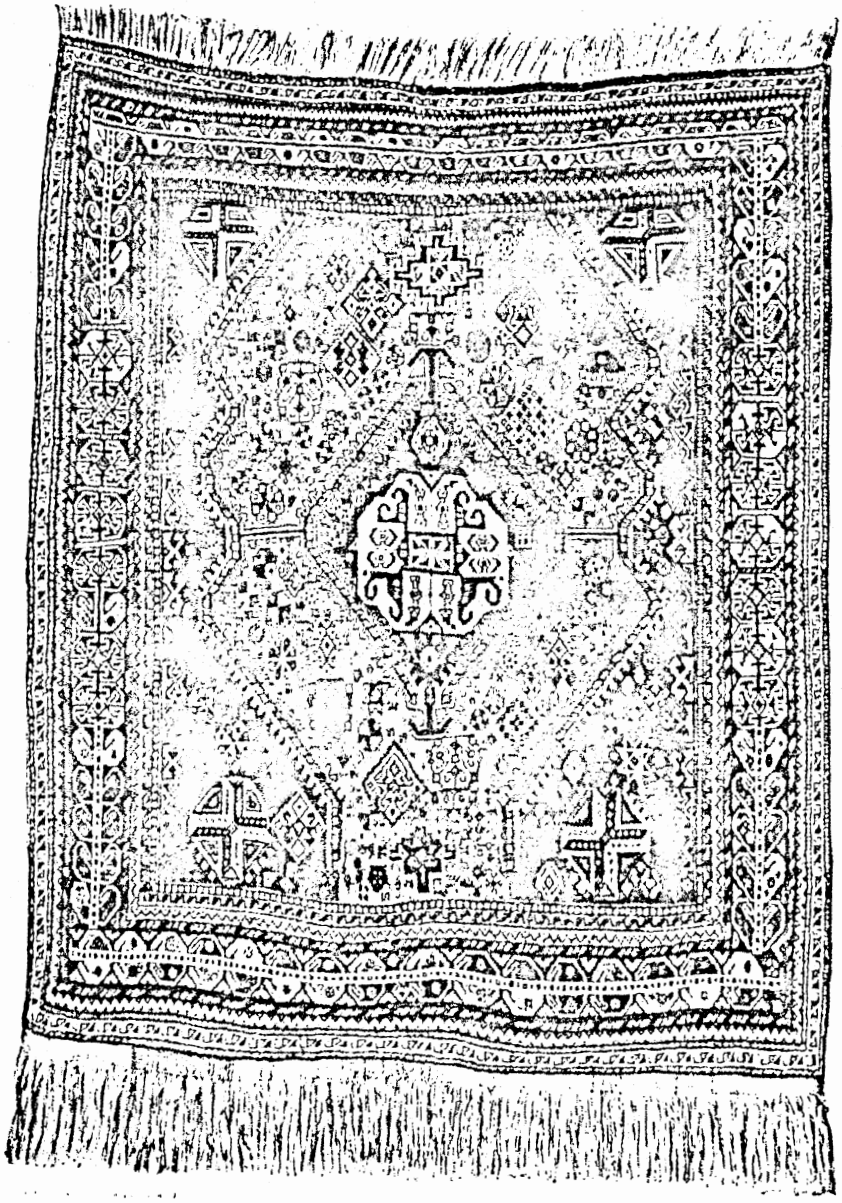


Figure 21. Shiraz of About 1950

The Kerman is one of those carpets which is still of good quality, even when manufactured today. The pale colors of the Kerman are reproduced in Figure 22. The medallion, composed of arabesques, stands in a center field, the corners of which are also filled with arabesques. The small designs of flowers are reated in the border.

Tabriz

The Tabriz became known and famous on account of its large hunting carpets. It is comparatively recognized because of the Turkish knot. Furthermore, it is thinner and lighter than any other Persian carpet. In spite of this it is durable, owing to its tight knots and being closely shorn. The wool is hard and not very glossy. The knotting of the pattern is neat and regular, so that it looks almost machine-made. It is remarkable for the realism of its pattern. Often, in the center field of the carpet, a medallion is worked on a plain background. Often, too, the medallion is combined with corner motives, and again with various kinds of animals and birds. Nowhere else can one find such an abundance of color and pattern. The colors are clearer than those of the Kerman. The Tabriz in Figure 23 shows a medallion as a centerpiece with patterned corners. The medallion is uniformly patterned with blossoms and flowers.

Hamadan

The Hamadan has neither the artistry of the pattern of the Kerman, the fineness of the Kashan knot, nor the richness of ideas of

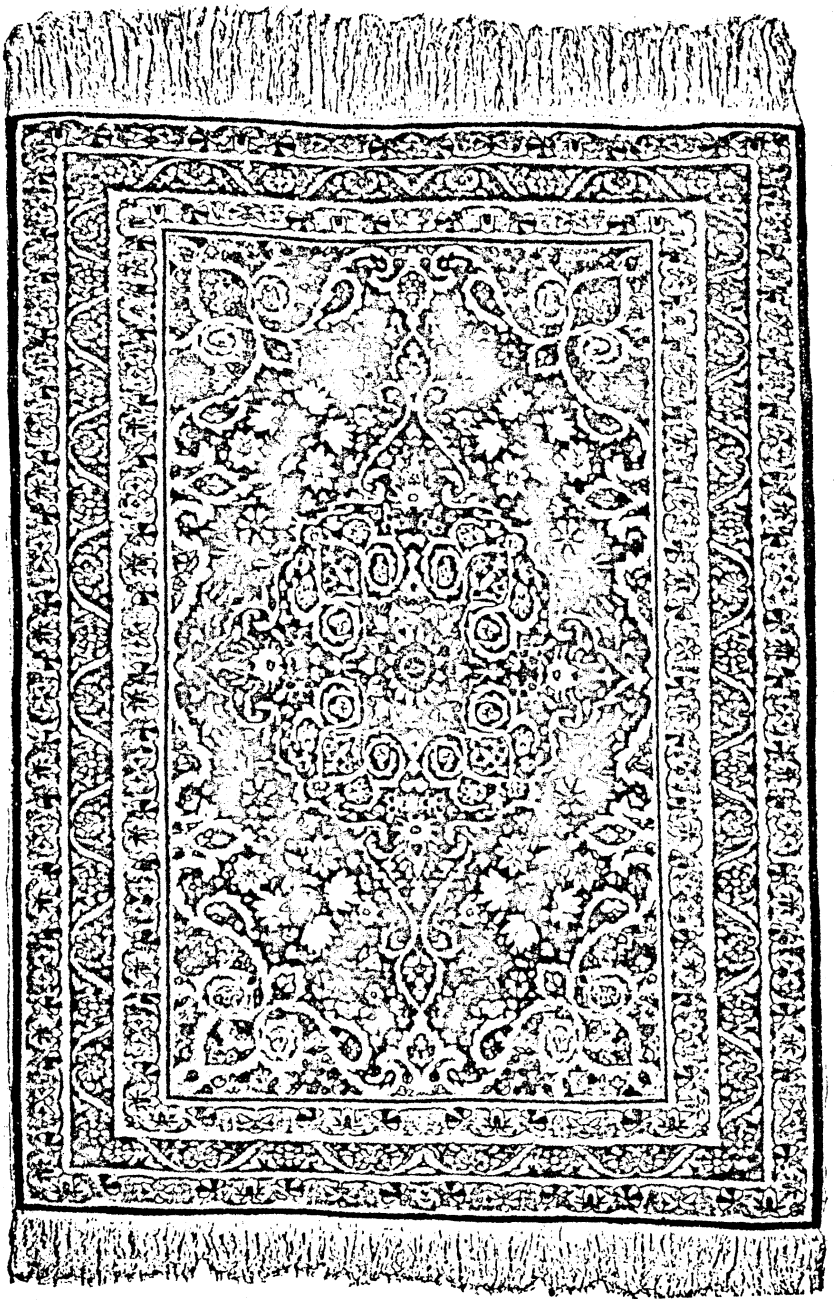


Figure 22. Kerman of About 1890

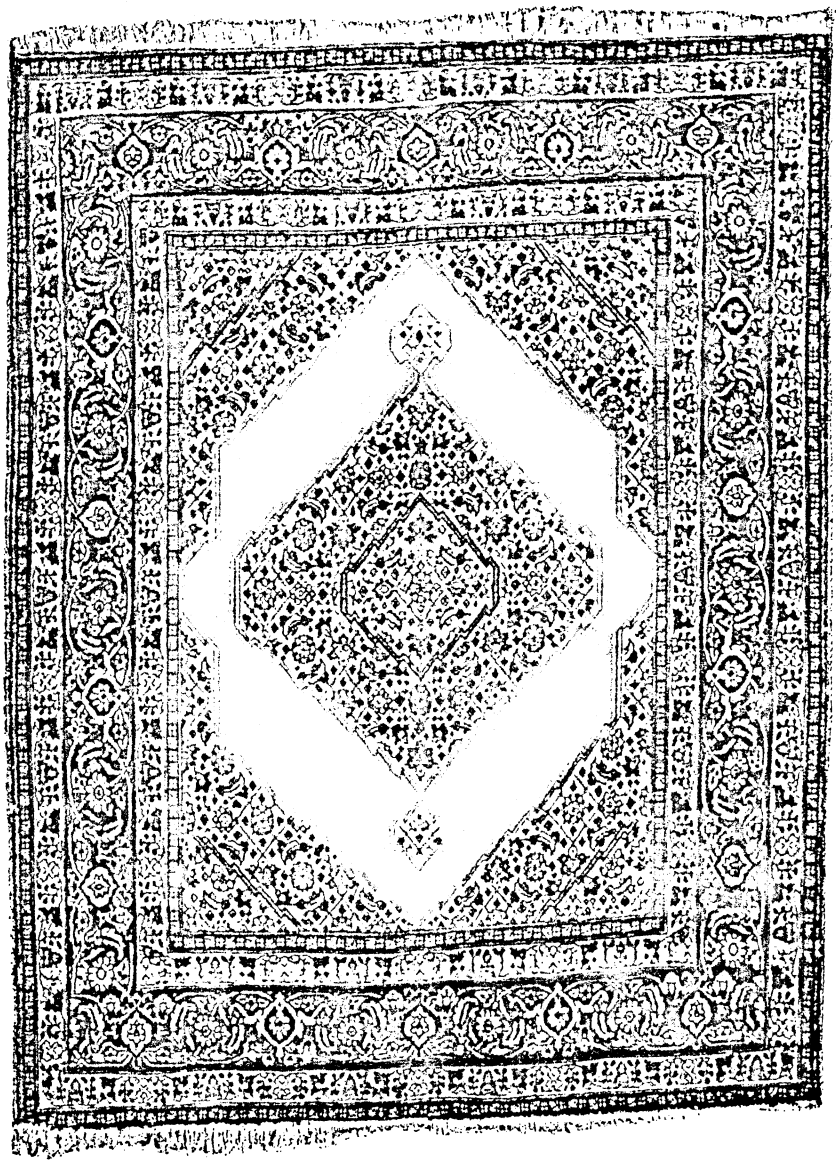


Figure 23. Tabriz of About 1910

the Tabriz, but it is the most hard wearing of all Persian carpets. The Hamadan carpet is particularly hard wearing because of its coarse, thick wool, which gives it a thick, deep pile. A feature of the Hamadan is the use of much natural-colored camel wool in its manufacture. The center field of the old Hamadans is always camel wool, and this carpet is easily recognizable by this natural brown tone. In the newer carpets the border is often a hand-wide, light strip of camel wool, followed by strips in red and blue. The background is patterned with a center medallion, or several medallions, angular tendrils, or figures of animals. On the whole, this pattern is of a more simple character than those of the Persian nomads. The effect of the arrangement of geometrical and stylized forms is primitive and powerful. In the older Hamadan carpets the colors often blend into one another. The carpet shown in Figure 24 has the natural camel color in the background. Dazzling blue and the type of pattern gives it a certain harshness that is reminiscent of a Caucasian carpet.

Bakhtiari

This name is perhaps misleading, as the Bakhtiari tribesmen do not knot this carpet. They are traded in Isfahan. The Bakhtiari has a firmer knot, and the wool is rougher and not so glossy as that of the Shiraz. The background colors are usually ivory, red, or blue.

The pattern is multicolored. The border is usually composed of a broad middle strip and two narrowguards, all of which carry flower patterns. The background, when it has no medallion, is often divided

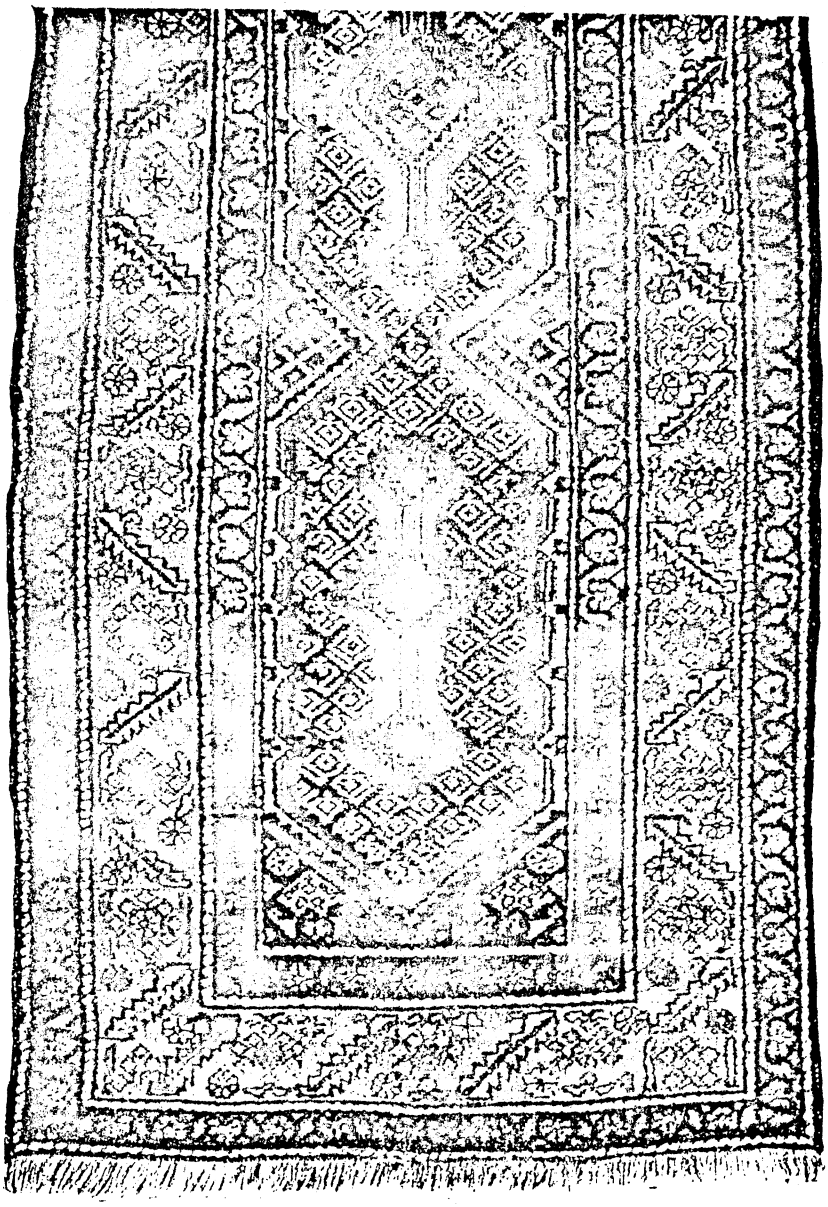


Figure 24. Hamadan of About 1930

into many small fields with a repeated pattern in which can be seen flowers, trees, diamond-shaped figures, and squares. In the new Bakhtiari, shown in Figure 25, the arrangement in the field can be clearly seen. The flower groups alternate with each other. The three strips of the border are also patterned with flowers.

Yomud

Some of the carpets are made by the Yomud tribe. Until recently, the background color of dark violet-red, toning to brown, was an acknowledged characteristic of the Yomud carpet. The pattern is knotted in polygons and diamonds ornamented with hooks, but since the second World War the Bokhara pattern on a red background is mainly used, as this pattern is in great demand. Figure 26 shows a Yomud with hook-ornament diamonds. The background color is dark violet, the diamonds are knotted in two shades of blue, white, and green. The border pattern shows saw-like, hooked tendrils.

The Tekkeh Turkoman is particularly valued as a durable carpet, because the tribe of Turkoman makes the best of the so-called Bokhara carpets. The Tekkeh Turkoman is very tightly knotted and closely shorn, and therefore very hard wearing. The very neat design of the pattern is worked in all shades of red on a red background. The octagon is always studded with hooks and extended lengthwise.

Isfahan

Under Shah Abbas, until the invasion by the Afghans, the Isfahan was a very valuable carpet. It has only been manufactured again

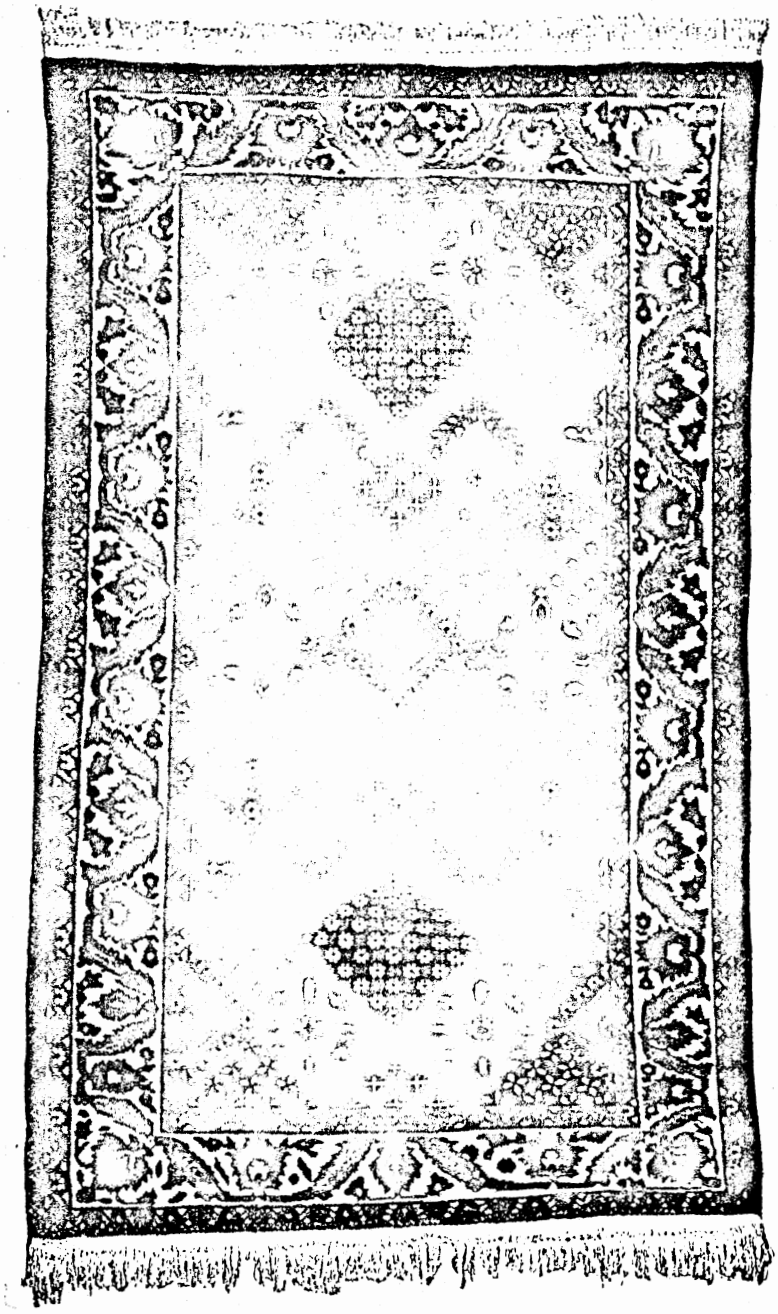


Figure 25. Bakhtiari of About 1950

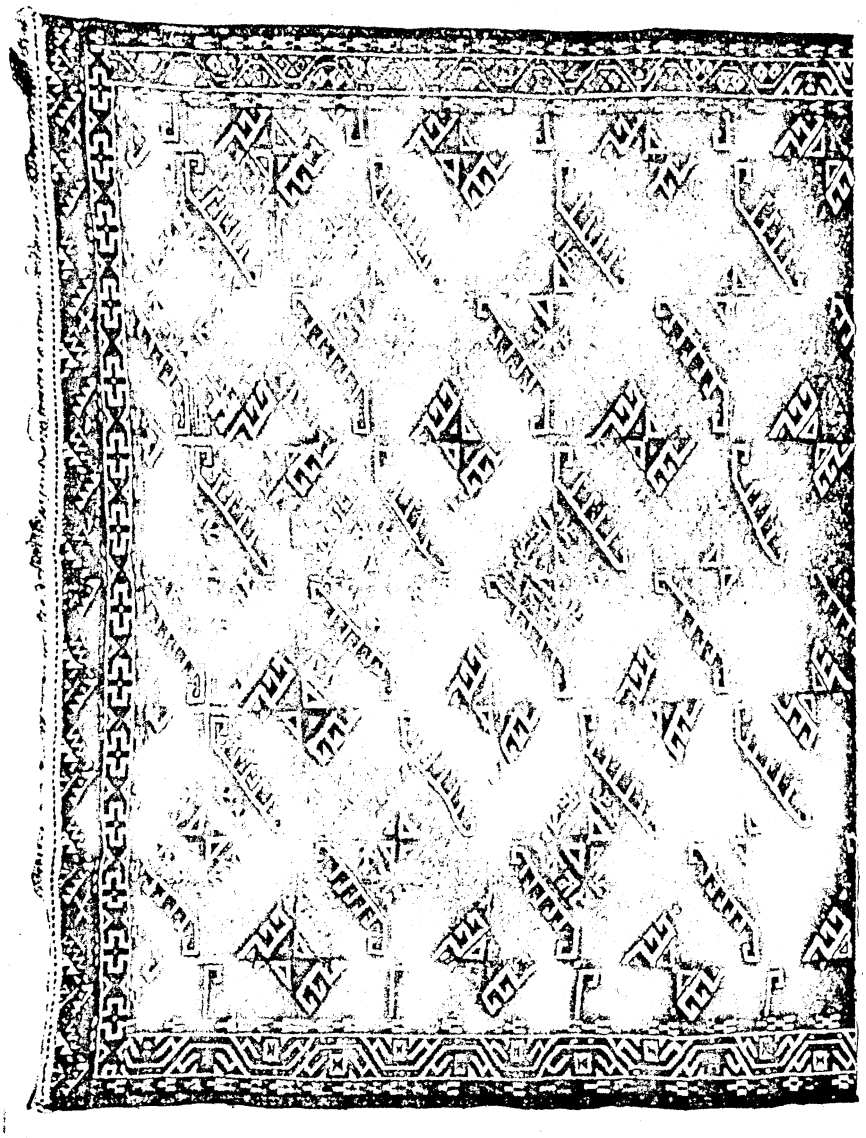


Figure 26. Yomud of About 1910

since the 1920's. At first, it showed all manner of faults because it was very roughly knotted, and it was only after the second World War that the quality improved. The background color of the largest areas of the Isfahan is ivory to beige, with brick-red borders and blue-black or brick-red medallions. Blossoms and forked tendrils, arabesques, and classical palmettes fill the free spaces. Figure 27 shows an old Isfahan with beige background color, brick-red arabesques, and a vaguely defined center medallion with two pendants. The border, which is composed of five strips, repeats the same colors and arabesques patterning. The four corners are filled with large palmettes.

## Patterns and Locations

A map of the country of Iran (Figure 28) shows the location of cities and villages in which rugs are produced. Rugs produced in the cities are generally made from fiber dyed with chrome dyes, and woven by using a drawn design or map. Following these drawings permits floral patterns, animal patterns, medallions, and elaborate borders. They are woven by hand in workshops or factories. Rugs from the villages have natural dyed yarns, use rectilinear designs with simple verticals, and horizontals. The rugs are a family product done in the home, each house having its own loom which is a treasured heirloom.

## Design Summary

Yazd: Open plain field, large floral medallion and corners, broken border, very colorful.

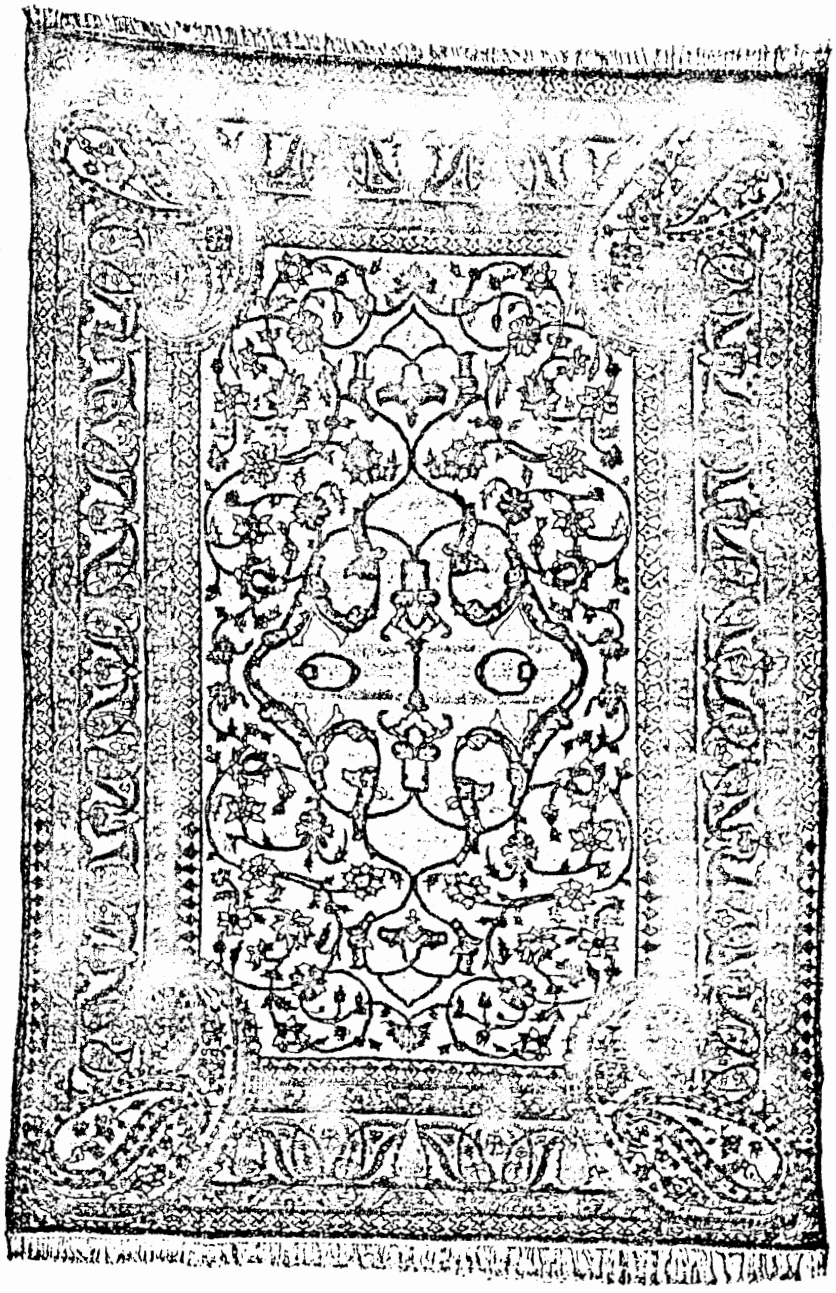


Figure 27. Isfahan of About 1860

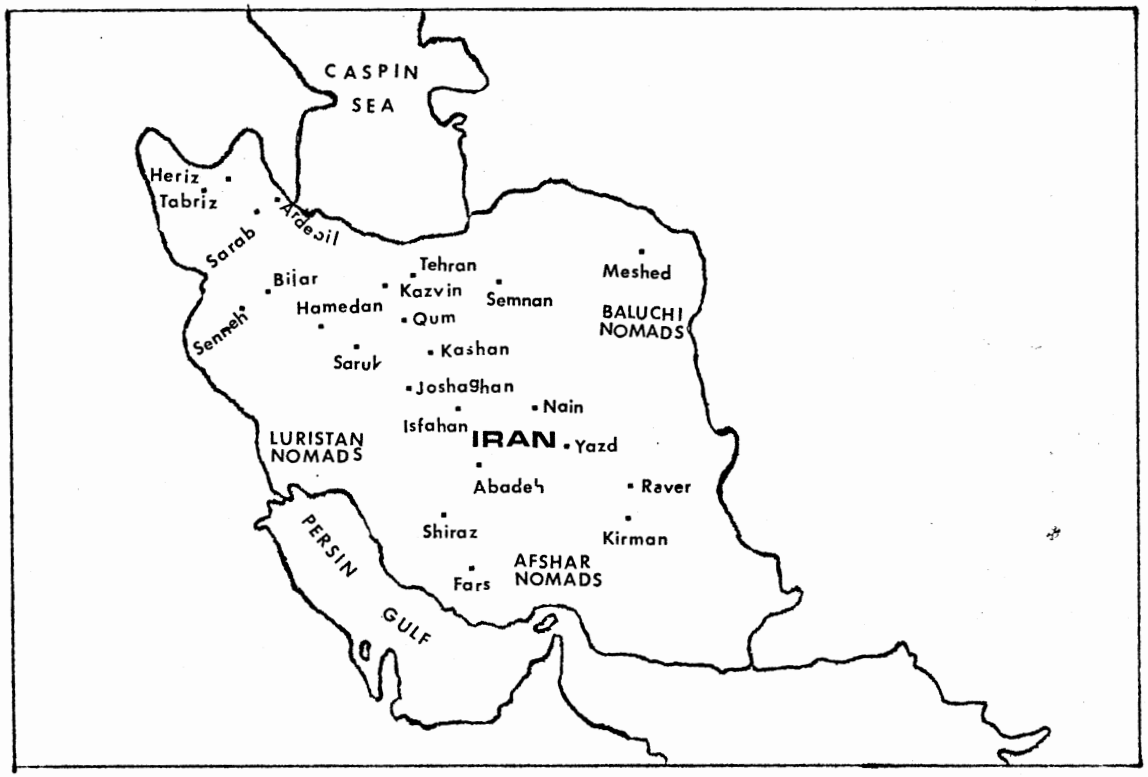



Figure 28. Map of Iranian and Turkoman Rug Areas

Ardebil: Most geometrical design, red and ivory field.

Bakhtiari: Rich blue or red, some with a floriated pear design and others with all-over designs, most geometrical design. Rich blue or red fields. Many come with ivory, green, gold, and yellow.

Bijar: Red fields, small medallion, and corners.

Birjand: Cochineal red fields, design is like Isfahan and meshed.

Ferahan: With a central medallion, surrounded by a uniform plain field, in red, ivory, and green.

Hamedan: Red fields, with the main borders in ivory or blue.

Herez: Geometrical medallion, field in some shade of red, rose, or rust, covered with a conventionalized angular floral design in blue, pink, green, ivory, brown, tinges of canary, and plum.

Isfahan: Old style--most Shahabbasi design combined with an intricate floral surrounding a central floral design, hunting and animal designs. New style--human figures and trees.

Joshghan: The motifs used are small, angular, floral designs set in the shape of diamonds and either repeated over the entire field or with a diamond centerpiece. Field will usually be in red and ivory.

Kashan: A few come with the cochineal red field. A medallion center and corners, but with an open, plain red field.

Kazvin or Ghazvin: Blue fields, some with very bright red fields, most with the central floral piece (medallion) and corners.

Meshed: The pears are floridated and covered with small floral designs, and often a small pear is superimposed at about a 45 degree angle. A few have open plain fields (with considerable shadings),

with only a large pear in each corner as a field design. The field of this kind of rug is often cochineal red.

Kerman: Usually ivory or cream field with the design having almost an equal amount of light blue and rose, and tinges of many other colors, such as green, red, and canary.

Kirmanshah: Usually ivory or cream field, in intriciate floral medallion and corners, and very intricate vine and floral design over the field in light blues, blue, rose, tan, and a small amount of green, plum, and canary.

Kordistan or Kordish: Some have a two-panel design with medallion on a soft gold or an apricot field, and a six inch panel at the lower side in a different design. Green, blue, yellow, white, and red are used in all of these.

Nain: The design follows the famous old Isphahan, with a general use of the famous Shah Abbasi design and finely drawn flowers and vines. Most come in ivory field.

Ghashghai: The field is usually in blue or wine, with lots of ivory. Each rug combines some of these three colors with some green and rose, gold, canary, plum, and brown. The outline of the field is angular and geometric in many rugs and they usually have a centerpiece or a hearth design effect. The entire field is covered with small octagon and star designs, small angular birds, and small human forms.

Qum: The all-over small vase with floral spray design with small, intricate floral designs is typical of these. There are many variations of this with the majority of them on an ivory field.

Sarouk: Old style--the vast majority of these are in the medallion design, often in pendant shape and occasionally having a two centimeter medallions, also with an ivory field with rose and blue as the background. New style--vast majority have an all-over floral design,with the rose field (some shade of rose or rosy red field), and with the all-over detached floral design. The border is almost invariably in a navy blue, with some form of floral design.

Senneh: Ivory field with large intricate pear design, in green, blue, canary, and ivory arranged in rows.

Shiraz: Many shiraz have the field covered with pear designs, others have rectangular and geometric figures like the caucasian rugs. A geometric pole medallion or two or more diamond shaped figures serve as the main outline in the field, with hundreds of small, angular flowers, animals, and especially small, angular birds.

Zinjan: The majority of these have a red field with angular medallions and corners, while some have floral designs.[2]

## FOOTNOTES

[1]Iran Farsh, Persian Carpets (Iran, 1974).

[2]Seied M. Ghaleh, Persian Rugs , Vols. I, II, III, IV. (Iran, 1975).

# CHAPTER V

## SUMMARY

Persian rugs came from a long line of traditions. They are an indigenous folk art that has been brought to the level of a fine art. They comprise one of the finest art forms, being a combination of color, pattern, texture, skill, and interpretation. The fact that they are handwoven adds a dimension of integrity and expression.

For Persian people a rug is a very important item of the household. In Iran it is often common to see the whole floor covered with rugs. They may be considered the Iranians' stocks and shares, for fine rugs only increase in value with age. These rugs are valued as heirlooms and are a most important part of one's heritage.

It is not pride of ownership but pride of heritage that make Persian rugs, to an Iranian, the symbol of house and home. The writer, through this study and beyond, hopes to perpetuate the tradition and the appreciation of the fine art of Persian rugs.

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