A STUDY OF PAKISTANI DECORATIVE TEXTILE DESIGN MOTIFS ADAPTED FOR USE IN WESTERN-STYLE CONTEMPORARY HOMES

By

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A PROBLEM

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Textiles, Clothing, and Related Arts

1962

ACKNOWLEDGMENT

The writer wishes to express her thanks and appreciation to her major professor, Mr. Robert Bullard, for his sincere guidance in this study, and to Dr. Mary Gephart for her advice and assistance in the writing of this problem.

Special appreciation is also expressed to Dr. Joanne Eicher, Pat Klobe, and Mary Shipley for their suggestions as members of her graduate committee, and for reviewing the manuscripts.

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CHAPTER I

INTRODUCTION

> Millions of yards are spewed from loom and presses the world over. Once in a long while someone with love for his crafts creates fabrics that sing, and we all are breathless with astonishment and admiration.[1]

How well said are these words from the mouth of E. M. Benson.[2] In the Indo-Pakistan subcontinent, for centuries people have been weaving, and have been producing fabrics which did sing for the people. As time passed it brought about new ideas, new techniques, and new tastes which went on blending one with the other. These changes were slow until the nineteenth century when a sudden spurt of development came through new machine discoveries, then the whole pattern of life began to change for mankind. Many men were replaced by machines.

The Western World accepted these changes quickly and easily, but the East with a strong traditional background, could not easily change or adapt itself to new modern mechanisms. The craftsmen in Indo-Pakistan, continued to

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[1] E. M. Benson, "Fabric International," Craft Horizons, vol. 21 (September-October, 1961), p. 5.

[2] Ibid.

produce fabrics that sang, but the song became stale and old. In contrast, this old song did not appeal to the modern machine-age man. Gradually these craftsmen began changing their occupations to avoid starvation, because people no longer appreciated the songs of their fabrics. Craftsmen who could not find their hands fit for any other occupation or manual labor literally starved to death and their tragic deaths are recorded in the Governor-General Lord Bentick's famous minutes. "The bones of the cotton-weavers are bleaching the plains of India."[1] Thus remained the state of affairs till the Second World War.

During this period the people of the Western World and to a certain extent the Eastern World as well, became accustomed to the amazing works of the machine. Realizing the limitations of the machine in producing variety, most scientists saw that something new and exciting was needed for restless mankind, who is never content with one thing for any length of time. The desire to create beautiful and useful objects is an incentive for creating new things.

Alice Adams said at the Fabric International Exhibition,

> The final challenge is put to the individual hand-craftsman. That he is needed by the scientist is an inevitability he cannot risk ignoring. And the scientist cannot deny his own humanity. The artists' insight binds him to his culture. If the two are going anywhere, it will have to be together.[2]

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[1]John Irwin, "Indian Textiles in Historical Perspective," Textiles and Ornaments of India, Monroe Wheeler, ed. (New York: Museum of Modern Art, 1956), p. 29.

[2]Alice Adams, "The Fabric as Culture," Craft Horizons, vol. 21 (September-October, 1961), p. 6.

Scientists can run the machines but they cannot create new atmosphere, new ideas, to make the fabrics sing. The scientist is not able to do the work of an artist.

This was the time when most of the hand craftsmen had all but disappeared in the West and were gradually disappearing in the East. At this time people like Gertrude Whiting, along with other prominent eastern women encouraged the women crafts workers.[1] Some of them played an important role in the revival of the crafts in the rural areas. Many women's organizations aided this revival and small industrial homes were opened for widows so that they could earn a living.

At the time of partition of the undivided India into two countries, India and Pakistan, sorrow came along with freedom. Thousands of people lost their lives and homes and had to move to Pakistan from India. Among them were the prominent craftsmen from different parts of India. Most of the people were worried and hungry. The Pakistan Government had the tremendous problem of rehabilitating the refugees, and consequently, could give little attention at that time to the arts and crafts. Gradually as the years passed, life became normal once again. Besides the women's organizations the Pakistan Government also started taking an interest in the Cottage Industries, centering the arts and crafts activities in the villages and suburbs.

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[1]Personal correspondence from Edith A. Standen, Associate Curator in charge of Textile Study Room, The Metropolitan Museum of Art, New York, February 6, 1962.

In 1960, a Design Center was established by the National Small Industries Corporation in Karachi, and now it is beginning to grow in other cities of Pakistan. Through this design center, the Small Industries Corporation is sponsoring a design movement and is instructing the artisans and craftsmen in their new role of placing acceptable designs on the market. In other words, new products create new markets.

Pakistan is in a very advantageous position; it possesses a wealth of rich and varied old traditional designs. With little or no adaptation these designs can very successfully be available for the needs of our modern contemporary homes. This can be evidenced in

> the designs of the Indus Valley civilization, which are very ancient and suit the modern cleanlined furniture and architecture of today. These designs, used cleverly and artfully in adapting themselves to everyday life, will contribute greatly not only in an economic manner but also in the historical and cultural education of the Western World regarding Pakistan and her neighbors.[1]

Purpose of Study

As Pakistan has no lack of design and craftsmen, perhaps this study will contribute to designers and craftsmen an even stronger awareness of possibilities for adapting the old traditional designs. Perhaps the craftsmen can revive their

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[1]Dorothy Habib, "In Search of Design," Contemporary Arts in Pakistan, Vol. 1, No. 7 (July, 1960), p. 18.

songs with new themes and make the fabrics sing once again for the benefit of modern civilization.

This study might also help indirectly in raising the standard of living of the poorly paid craftsmen of Pakistan. By helping them to adapt their designs for export to western markets, they will increase their production and ultimate remuneration. Moreover in lieu of a world market which includes Europe and might include the whole world some day; export in these markets would be easier if designs were developed with the foreign consumer and his taste in mind.

The objectives of this study are:

1. To experiment with traditional Pakistani designs and motifs in order to modify them for contemporary western tastes.
2. To incorporate the principles of good design with traditional Pakistani designs in executing the modifications.
3. To adapt five traditional Indo-Pakistani designs to the needs of the western markets.
4. To create five additional design motifs from Urdu script to be used in contemporary homes for both eastern and western markets.
5. To explore the weaving and printing possibilities and to experiment with one of the designs, using weaving, blockprinting, stenciling, and silk screen techniques.

CHAPTER II

REVIEW OF LITERATURE

Historical Background of Indo-Pakistani Textiles

The British Indian Empire was divided into two nations on August 15, 1947, India and Pakistan. Later, Pakistan was the smaller of the two nations. Unlike the new free India, Pakistan had to build a completely new central government. Pakistan consisted of two separate blocks of territory hundreds of miles apart; it inherited neither a capital nor an administrative machine as India did. However, since present India and Pakistan were one dominion before 1947, the historical background of these two countries is the same.

Arts and crafts of Indo-Pakistan today show the influence of the Indus Valley civilization of prehistoric times. The Hindu culture, the Buddhist culture, and the Muslim culture have influenced all areas of the fine arts, textiles, sculpture, pottery, architecture, metals, and music.

The origin of art knowledge can be traced back two thousand years. Excavations of two ancient cities Mohenjo-daro and Harappa in the Indus Valley region have revealed a civilization that existed in the Third Millennium B. C., or perhaps earlier.

> Among the most numerous artifacts were seals which bore inscriptions in a still-undeciphered script and

> representations of animals including the zebra, the elephant, and the tiger, all fantastic animals and demonic figures. Most of the representations are not only organically convincing but they exhibit as well a naturalism that is fully able to depict the subject recognizably and which already is in the process of selecting and eliminating fortuitous detail. Animals are uniformly portrayed in profile, although the horns are sometimes shown from the front view.[1]

These seals are very popular at present with craftsmen in Pakistan, especially in the field of textile printing.

The Aryans conquered northern India at about 1500 B.C., and brought nature worship with them.[2] This soon took the shape of a religion, and the Hindu religion emerged from it. The basic philosophy of Hinduism is,

> (1) that all existence comes from the "sea of life," and everything including gods, return to it in order to be born again, (2) that the condition in rebirth is dependent upon the type of life spent in previous existences and that merit is gained or lost according to individual acts (Karma), (3) that the only release from existence is in the destruction of personality, and its union with the absolute. (Moksa).[3]

Out of this religion came Buddhism, not too different from Hinduism. The basic philosophy of Buddha was that "one could escape his Karma by attaining release from all earthly desires through enlightenment. (Nirvana)"[4]

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[1]Louis Homticq, et al., New Standard Encyclopedia of Art (New York: Garden City Publishing Co., Inc., 1939), p. 181.

[2]Ibid.

[3]Ibid.

[4]Ibid.

Hinduism believes in many, many gods and goddesses; each god has assigned roles and can deal with only that aspect of life of which he is a god. Hindus made idols of these gods and worship them; these idols could be in human, animal, or any fantastic form related to human or animal anatomy. Such engraved figures appear in many ancient Hindu and Buddhist temples and monuments and the temple cloths. In many textiles of today these figures appear in either woven or printed form.

Muslim invasions started in India about the eleventh century.

> At the beginning of the sixteenth century the territory was consolidated under the rule of the conquering Moghuls, as these emperors styled themselves. Northern India was ruled by various Moslem dynasties until the art of the country became essentially the Mohammadan art of the Near East.[1]

Geometric patterns and Arabic inscriptions were the decorative motifs, which still are popular in architecture and other decorative arts in Indo-Pakistan.

During the Moghul period the textile decorative arts were under the patronage of the Moghul court. Textiles of that period show both Hindu and Persian influence in design. India learned many weaving techniques from Persia, especially in rug making. The decorative motifs were the naturalistic floral designs in both textiles and rugs.

Textile designs have been deservedly famous throughout the ages in Indo-Pakistan. A study of ancient Indian

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[1]Ibid., p. 182.

literature, painting, and sculpture shows that Indian fabrics enjoyed undisputed supremacy all over the world for nearly 2000 years. Even the Rig Veda[1] refers to hiranya-drapi or shining gold woven cloak, the Mahabharata[2] to manichira, probably a fabric with pearl-woven borders, and Pali literature to kaseyyaka[3] of Banaras,[4] worth a hundred thousand silver pieces.[5] Cotton cloth dyed with madder has been found in Mohenjo-daro. "The numerous spindle whorls and bronze needles discovered at Mohenjo-daro testify to the wide popularity of the art of weaving and embroidery in ancient India. The old sculptures and paintings depict brocaded and embroidered materials of exquisit patterns."[6]

> There are records of the export of silk and cloth of gold to Rome in the reign of Tiberius. But the knowledge of silk weaving is known to have come from China, and the Sanskrit word for silk cloth is closely linked with its Chinese origin. It was in cotton that the genious of the Indian weaver, painter, and embroiderer was to find its richest and boldest expression.[7]

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[1]One of the religious books of Hinduism.

[2]Hindu epic poem.

[3]Name of fabric.

[4]Name of Indian city.

[5]Ajit Mookerjee (ed.), Designs in Indian Textiles (Calcutta: The Indian Institute of Art in Industry, Artistry House, 15 Park Street, Calcutta), p. 3.

[6]Ibid.

[7]Pupul Jayankar, "Indian Fabrics in Indian Life," Textiles and Ornaments of India, Monroe Wheeler, ed. (New York: Museum of Modern Art, 1956), p. 139.

One of the favorite techniques to express this genius was printing with wooden blocks. This technique may have originated in India; no prehistoric textiles have survived to prove this assumption but indications of early block printing are found in sculptures and paintings. Some Egyptian printed cottons and textiles dating from the Roman Period also seem to show Indian influence.[1]

Ancient Block Printing Technique

Block printing today is a very popular technique and was certainly known in the days about which the Greek scholar, Airian, wrote and probably in the days of Mahabharata as well.[2]

Ever since the period of the Crusades, Europe had been somewhat aware of the printed cottons in India and Java. It has even been said that America was discovered because Columbus was searching for the block printed fabrics of the Far East.[3]

Calicos are the most ancient and popular block prints. Beauty of design and color and the fastness of the dyes contributed a great deal to their popularity in the European countries. "The prevailing motifs are the Kalka or flame

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[1]Anand K. Coomaraswamy, History of Indian and Indonesian Art (New York: E. Weyhe, 1927; London: E. Goldston, 1877), p. 139.

[2]Mookerjee, op. cit., p. 5.

[3]Verla Birrel, The Textile Arts (New York: Harpers and Brothers, 1958), p. 432.

pattern, floral sprays or butis arranged diagonally, diapers and birds, especially the peacock. The border usually consisted of a continuous floral pattern or bel."[1]

Nowadays many traditional design motifs are being block printed on machine woven textiles with successful effects.

The same technique of block printing was used in the old days as is used today. The design is engraved on the wooden blocks according to the detail and size of the printed pattern. The thickness of the block varies in size from one-fourth to one-half inch. Metal or brass strips are also used for details and fine lines. To print, the block is charged with color. It is slightly pressed over a leather covered with color-impregnated paste, then the block is stamped on the fabric and pressure is applied. The number of blocks used in a design is determined by the color scheme.[2]

Other Printing Techniques

Other ancient techniques applied to textiles are hand painting, resist dyeing, and tie dyeing. In painting, dyes are applied directly on the cloth by the craftsman with a

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[1]Mookerjee, op. cit., p. 5.

[2]Richard Glazier, Historic Textile Fabrics (London: B. T. Botsford, Ltd., March, 1921), p. 95.

stick or brush. This technique is very expensive and requires a great amount of skill. The present tendency is to limit the use of the stencil printing method to designs requiring great accuracy and an exact repeat in the design.

Another method of hand painting, or dye painting, or wax resist drawing is called "qalmdar," which is equivalent to Javanese batik. Sometimes block printing is also used in combination with qalmdar.

In the tie-dyeing technique the design which is made up of small dots is tied tightly with a thread. The portions of the fabric which are tied do not absorb the dye thereby producing the design. To get several color effects the dyeing process is repeated again and again.

Another very interesting technique which is most effective is achieved by dyeing separately the warp and weft before weaving; the design develops in the weaving process.

Woven Fabrics

The history of the Muslim weavers goes back to the reign of the Muslim monarchs of India. The great Mohammed Tughlak (1310-1348) had four thousand artificers who wove gold brocades, zarakis[1] for the sultan and his wives. He also presented these gold brocades to his ministers as robes of honor.[2]

In 1663 Francois Bernier wrote to the great French Minister about the workshops maintained by Emperor Akbar in

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[1]Name of fabric.

[2]Zahida Amjad Ali, "Cloth of Gold," Pakistan Quarterly Vol. 8 (March, 1958), p. 39.

Delhi. "In a sixth (work), manufacturers of silk, brocades and those fine muslins of which turbans are made, girdles with golden flowers, and drawers worn by females, so delicately fine as frequently to wear out in one night."[1]

Travernier tells about the astonishingly large silk output--22,000,000 livers or two and a half million English pounds yearly in Bengal in 1666. One-third of this was used by the weavers themselves, one-third was consumed by the other weaving centers of the Moghul Empire, and one-third was purchased by the Dutch for trade in Europe.[2]

A record dated October 3, 1684, of an order sent by the India Company to Dacca read, "to send a good quality of flowered Mulmuls, ye floweres to be wrought upon ye finest Mulmuls, and 5 to 6,000 pieces to be wrought variously, some with silk and silver, some with silk and gold, some with gold and silver."[3]

John Ovington, writing in 1689, said, "In some things, the artists of India outdo all the ingenuity of Europe, viz. in the painting of Chites . . . the gold stripes in their sooseys,[4] and the gold flowers in their atlases[5] are

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[1] Ibid.

[2] Ibid. Quote from same periodical; original source not known.

[3] Ibid.

[4] Name of fabric.

[5] Name of fabric.

imitated with us but not to perfection."[1]

These weavers were the great Muslim craftsmen of India, who were a product of their traditions, and whose skill was passed to them from one generation to another. Sir George Watt, Director of the 1903 Great Art Exhibition of Delhi, said,

> In Benaras, the writer was enabled through the enthusiastic cooperation of the Collector, Mr. Radice, to visit all the leading kinkhab[2] weavers at their factories and to discuss with them the origin of the designs in use. It then transpired that there are usually three persons concerned in the "Kinkhab" trade--the designer who is invariably a Mohammadan, the weaver who may be either a Hindu or a Mohammadan, and the vender or trader who is almost invariably a Hindu.[3]

These Muslim designers and weavers are now refugees from India and have settled in Pakistan. Most of the other woven fabrics in the country are the simpler forms of weaving based on the same techniques, whether they are jamdanies[4] of Dacca, either in silk or cotton, lungies[5] or turbans and handkerchiefs of Peshaar, tie-dyed chunries[6] of Sind or the daryai[7] or khes[8] of Multan. These fabrics are all different

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[1]Amjad Ali, op. cit., p. 39.

[2]Name of a fabric.

[3]Amjad Ali, op. cit.

[4]Name of a fabric.

[5]Name of a fabric.

[6]Name of a fabric.

[7]Name of a fabric.

[8]Name of a fabric.

varieties of silk and cotton weaving. The refined and developed version is called "banarsi" cloth, usually made with gold and silver threads.

There are two kinds of banarsi weaves, "ek tara" and "patha," a loosely woven and a closely woven cloth. Ek tara gives the effect of gauze and fine muslin; it was called "ab-e-rawan" or flowing water in the olden days. Now it is used to make scarfs, dupattas,[1] and turbans. The other variety, patha, is used to make garments like blouses, kamees, shalwar, saris, or ghararas; draperies, upholstery, and shoe covers. The name of the material normally is kinkhab or poath if it is woven with gold thread. The gold thread used in Pakistani banarsi is always zari or "kasal." The history of this gilded silver thread goes back to the tenth century or perhaps earlier in Iraq. The technique of weaving in present-day Pakistan is almost the same as it was in these earlier days.

Process of Weaving

The steps in the preparation of yarn for weaving are as follows:

1. The silk yarn is unwound on a large spool made of bamboo strips. One composite yarn is produced by winding five strands of yarns from the spools, on one "charkhi" or reel.

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[1]This and other Pakistani garments are described in Appendix, p.

2. The yarns are bleached by boiling in soap solution.

3. After dyeing yarns a variety of colors, the yarns are ready for weaving.

The steps in weaving most fabrics include:

1. The warp yarns are first spread out on a vertical structured warping machine, similar to one used in tapestry weaving.

2. The warp is beamed.

3. For the weft yarns silk or gold threads are wound on three-inch pieces of wood lengthwise and are hung on either side of the frame to serve as bobbins.

4. The design is worked out on the "Jacquard" machine. It is then fixed on the loom and weaving proceeds.

The fineness of the cloth differs according to the quality. In "ek tara" or gauze variety fabric there are normally 2,000 yarns in a 45 inch warp, although they may range from 900 to 2,500. In "patha" or close woven fabrics of the same width there are usually 5,200 warp yarns, but the number vary from 3,200 to 6,200. In satin cloth these warp yarns range from 8,000 to 15,000 yarns for 45 inch wide material. The filling yarn count is normally 85 per inch in all weaves, though it may range from 54 to 135 per inch.

Gold yarn is used in the warp only in areas where the design occurs; the balance of the weaving is done with silk filling yarns; when gold thread is used in the weft it is added only in the design area. The former is called "lachha"

and the latter is "naqshi," which is superior and is actually real brocade. Brocading means to add extra weft yarns to be woven with the weft for design effects, and cutting off the ends where the design finishes, thus saving the valuable gold thread. It is a kind of embroidery done on the loom.

When the gold design is enhanced by extra colored silk yarn the technique is very appropriately called "meena" or enamelling work. When only one color is used along with the gold, the process is called "alfi," and when a third color is introduced in the design, it is called "tehra" meaning that a third process is used in the weaving.

Color effects are produced (1) by dyeing the yarn in a variety of colors; (2) by using different color yarns in warp and weft; (3) by employing two colors in warp and weft to achieve a two-tone effect called "thunder and lightening"; (4) by using entire weft of gold yarn, either woven over the warp when it shows on the surface, or using a satin weave. In saris these color effects are produced by using different colors for border, patli, and pallu.

The brocade designs can be categorized in three styles: (1) Booti--small separate designs scattered all over the fabric or when big they are called "boota"; (2) Jaali-dar--the over-all trellis design; (3) Bel-daar--border designs and braids.

Popular designs for weaving are the flame or cone design formed either by line or by flowered motifs; vase

design with separate nosegays of flowers; turang or tree of life with branches turning and twisting all over forming interesting shapes; the flying geese; and the trefoil design from the bust of the bearded men of Mohenjo-daro dating 5,000 years ago.[1]

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[1] Amjad Ali, op. cit., p. 43.

CHAPTER III

METHODOLOGY

This study is an experimental study based on the possibilities of applying different hand craft techniques of textile decoration for use in furnishing today's contemporary interiors. American interest in the Indo-Pakistan textile craft is proved by glancing at the pages of current American textile and craft magazines. The names of periodicals to which the author refers include American Fabrics, Craft Horizons, Handweavers and Craftsmen, and Ciba Review.

Since the link between Western and Eastern culture is coming closer and closer each day, a study of this nature should help to bring about a better understanding of the arts and crafts industries of the two countries, Pakistan and the United States of America. It may help indirectly in raising the standard of living of the poorly paid craftsmen of Pakistan by providing a foreign market for their crafts.

The contemporary trends in the Western as well as Eastern interiors demand the emphasis on simplicity and utility of the design within reasonable cost. The skill and the pool of designs of the East can be very easily

utilized to satisfy or fulfill this need. Hence the author has experimented with the traditional, intricate Pakistani designs and motifs, redesigning and simplifying them and at the same time incorporating the principles of good design.

In the review of literature an historical background with different cultural influences on the textile arts in Indo-Pakistan is discussed. The five traditional designs for this study were selected from a variety of sources. One design is selected from an architectural motif, since the trend today is to bring unity between exterior and interior of the home. The second design is selected from ancient pottery. If similar design motifs are used in drapery and upholstery as well as in accessories, a feeling of unity in design detail will help to create harmony. The third design is selected from an old traditional but still popular design of a saris from East Pakistan. The motif is stylized flowers and geese. The fourth design is taken from a handwoven fabric used as a bedspread from West Pakistan. This is a geometric design and has many printing possibilities. The fifth design is the famous tree of life design taken from a Kashmir hand embroidered scarf. Kashmir shawls with this design are very popular with Americans.

In addition to these five traditionsl Pakistani designs modified for use in contemporary interiors, five designs were created from Urdu script, by stylizing some of the alphabets. "Urdu" is one of the national languages of Pakistan and the

script resembles the Arabic script. All these original designs have been photographed; the modifications have been executed by making graphical sketches which in turn have been photographed.

In the later chapters, some of the designs based on the Urdu script are experimented with block printing, silk screening, stenciling, and weaving techniques. The contemporary techniques for making these designs are also discussed in detail in Chapters V and VI.

The last chapter deals with a discussion of the four techniques of textile decoration, and the execution of the modified designs in the light of books written on contemporary trends by the modern authorities and designers on arts and crafts today.

CHAPTER IV

TRADITIONAL DESIGNS

Geometric Architectural Design

The first design was taken from the book Art Ages, edited by Pedro J. Lemous. In the early Saracenic art no symbols or figures of human and animal anatomy appeared; most writers agree this was according to the preachings of Prophet Mohammad. The main reason why the Prophet was against the drawing of these figures was to help people not to become idol worshipers. In the very early days of the Muslim art and architecture, no human or animal figures appeared; the designs were mostly geometric with a combination of the Arabic inscriptions. Their designs were enhanced through brilliant, strong colors with gold and silver combinations. This art was brought into Indo-Pakistan by the Muslim monarchs who made India famous through their architecture and crafts. The famous Taj Mahal, one of the Seven Wonders of the World, is a proof of their artistry and skill.

These geometric designs of the old architecture can be a very good source of inspiration for contemporary designs; they can lead a designer to create many interesting and simple designs for interiors. By combining and

coordinating the architectural motif in textiles and crafts, for use in the interiors, unity in design throughout the home may be achieved without a monotonous feeling.[1]

Today there is a tendency to combine and bring unity between the exterior and the interior of the house. Marianne Strengell has said that,

> In my opinion the most interesting and progressive change in handweaving over the last ten years are two-fold, and fundamentally divergent. One is approval and use of textiles by architects and designers, as another and functional building material, utilizing room dividers, light diffusing fabrics, wall and ceiling treatment. The other is weaving used as an expression of pure art, not necessarily functional, but equal in importance with an abstract painting or beautiful piece of sculpture.[2]

The photographic print shown in Illustration 1 is a traditional architectural design; the two designs showing adaptations in Illustration 2 can be effectively printed in any desired scale in one or two colors. Illustration 3 shows the negative view of the same designs. Draperies printed with a negative and positive color scheme in these designs and used as panels in a room might prove interesting. Architectural grills could also be made effectively from this design.

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[1]"The House as a Work of Art," House Beautiful, vol. 102 (February, 1960), pp. 89-177.

[2]Marianne Strengell, Handweaver and Craftsman, Vol. 10-11 (Spring, 1960), p. 11.

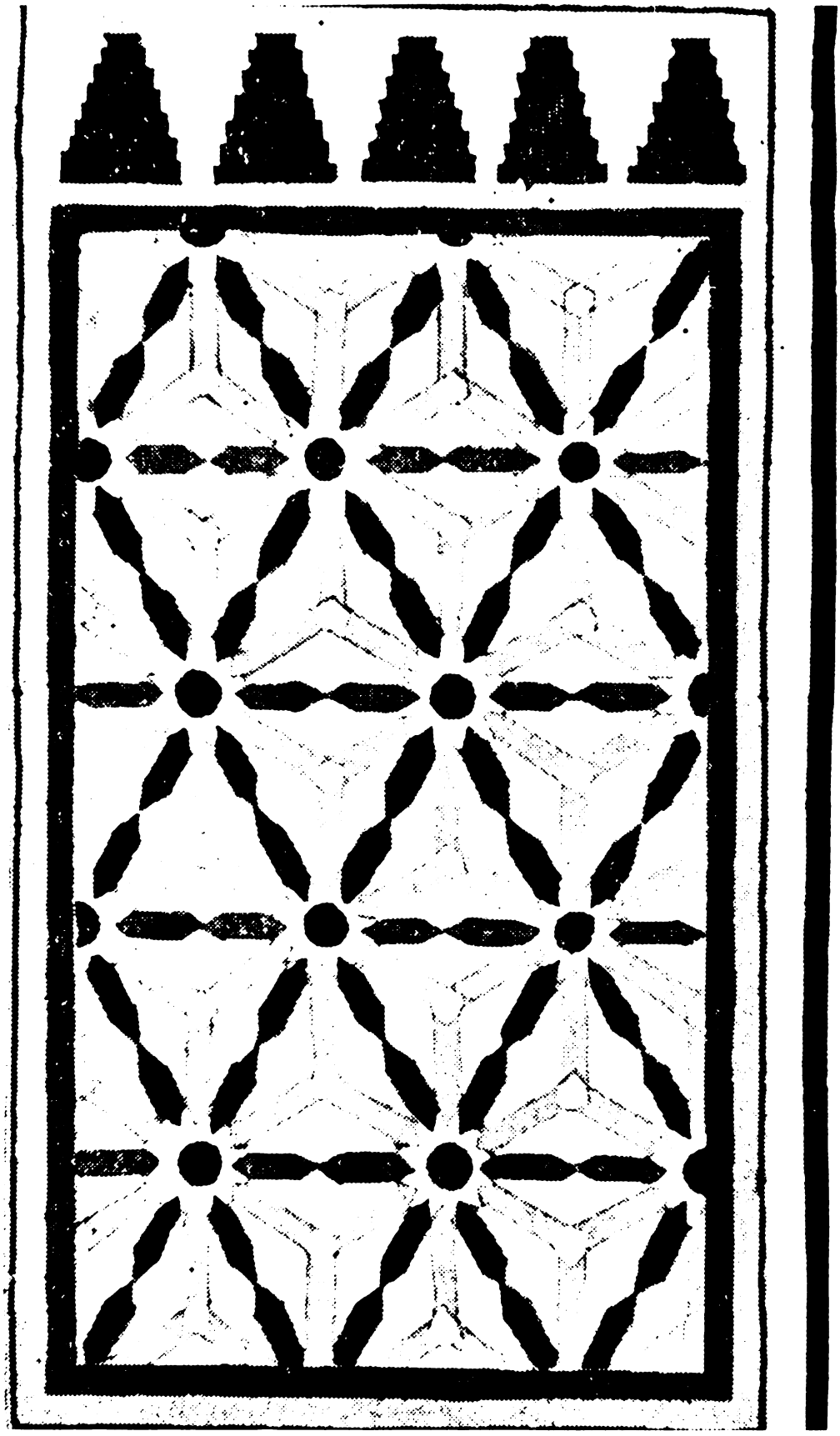

Illustration 1. Historic Muslim Architectural Design

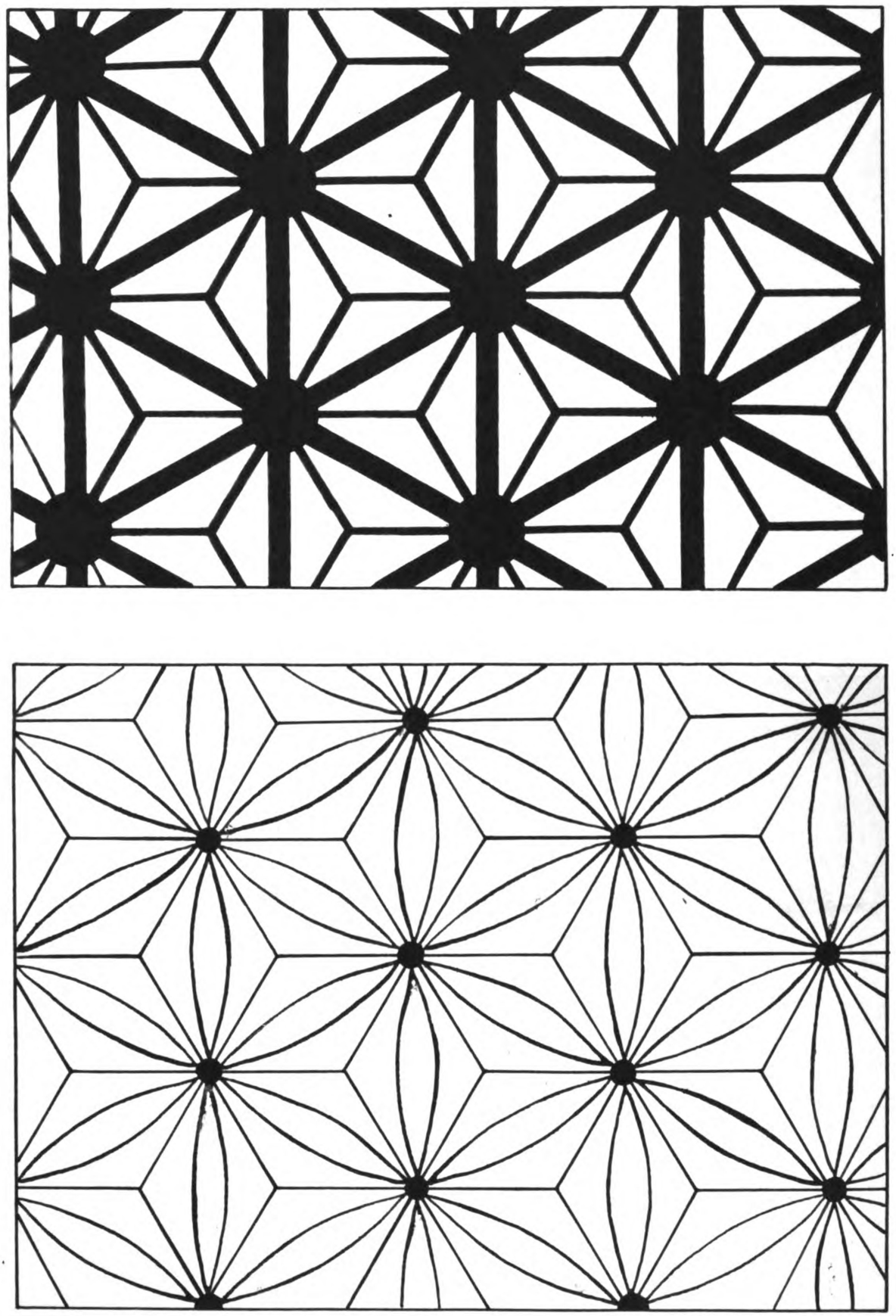

Illustration 2. Adapted Design from Architectural Motif (Positive)

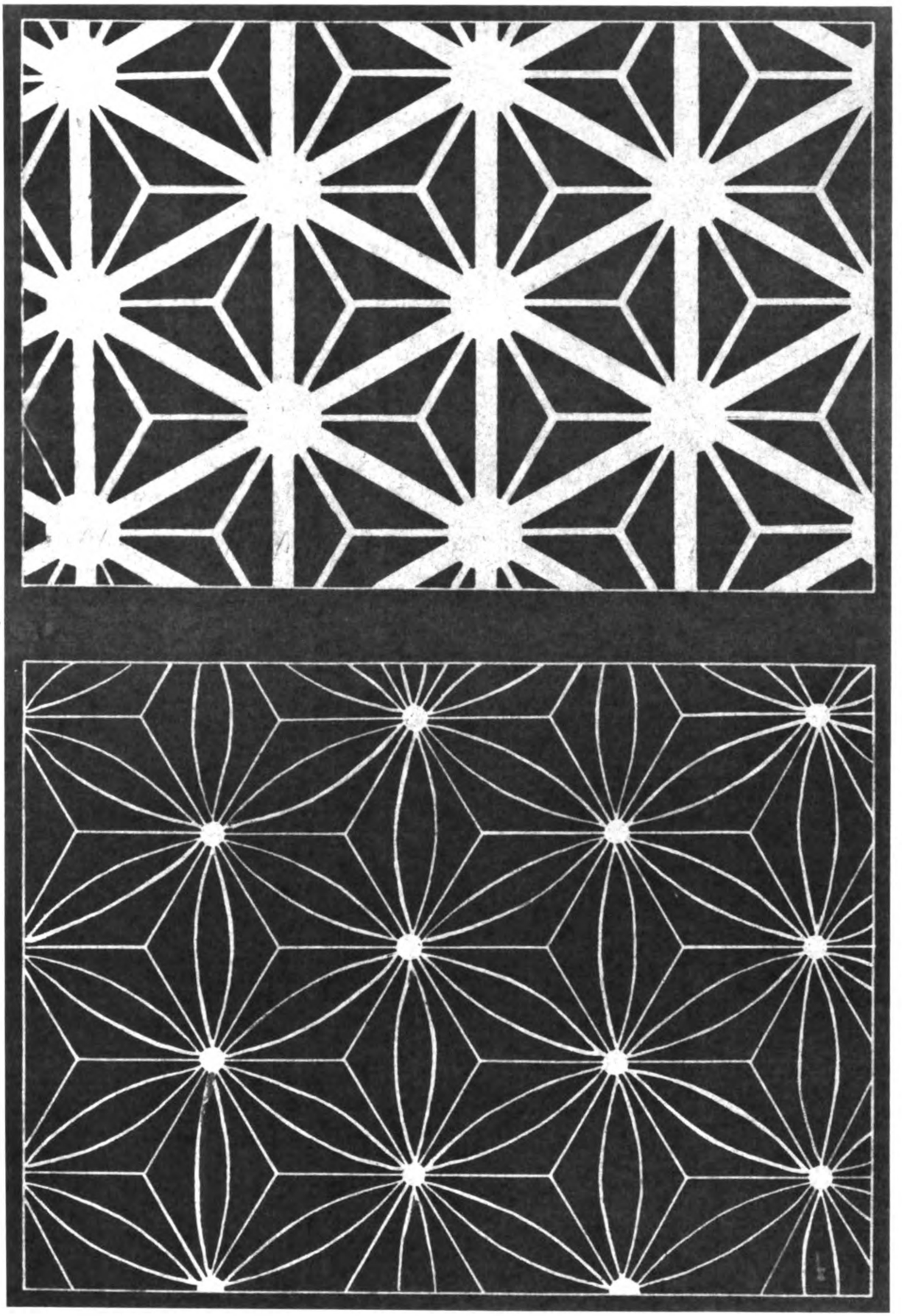

Illustration 3. Adapted Design from Architectural Motif (Negative)

Flowered Pottery Design

The original design[1] of glazed pottery in Illustration 4 comes from the ancient Punjab, the Kutcha area of Indo - Pakistan; it is simple and beautiful and has many adaptive possibilities for textile decoration. Prehistoric and archaic epochs and the folk art can be of great help in bringing related art impulses to the surface, especially for those who are in search of new looks in fabrics. To satisfy this craving, these ancient designs can be most rewarding in the search for new artistic expressions.[2]

George Nelson thinks fabric is a structure.[3] To blend this structure in the interior one has to think of the whole room as a single entity. The similar motifs or related colors in the fabrics and ceramics in a room can be very interesting and soothing to the eye, thereby producing harmony, balance and rhythm.

Because ceramics play an important part in interior designs, collaboration of the pottery designer with the architects of interiors is important for functionalsim and beauty.

The center design of the pottery plate in Illustration 5 can be very effectively printed on fabric as designed in the two top left and bottom designs. The center part of the

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[1]Otto V. Falke, "Prefatory Notes,"Ornament in Applied Art, Introduction and Catalogue by H. T. Bossert (New York: Gotham Book Mart, 1924).

[2]Ibid.

[3]George Nelson, "Structure and Fabric," American Fabrics, vol. 37-40 (August-November, 1956), p. 34.

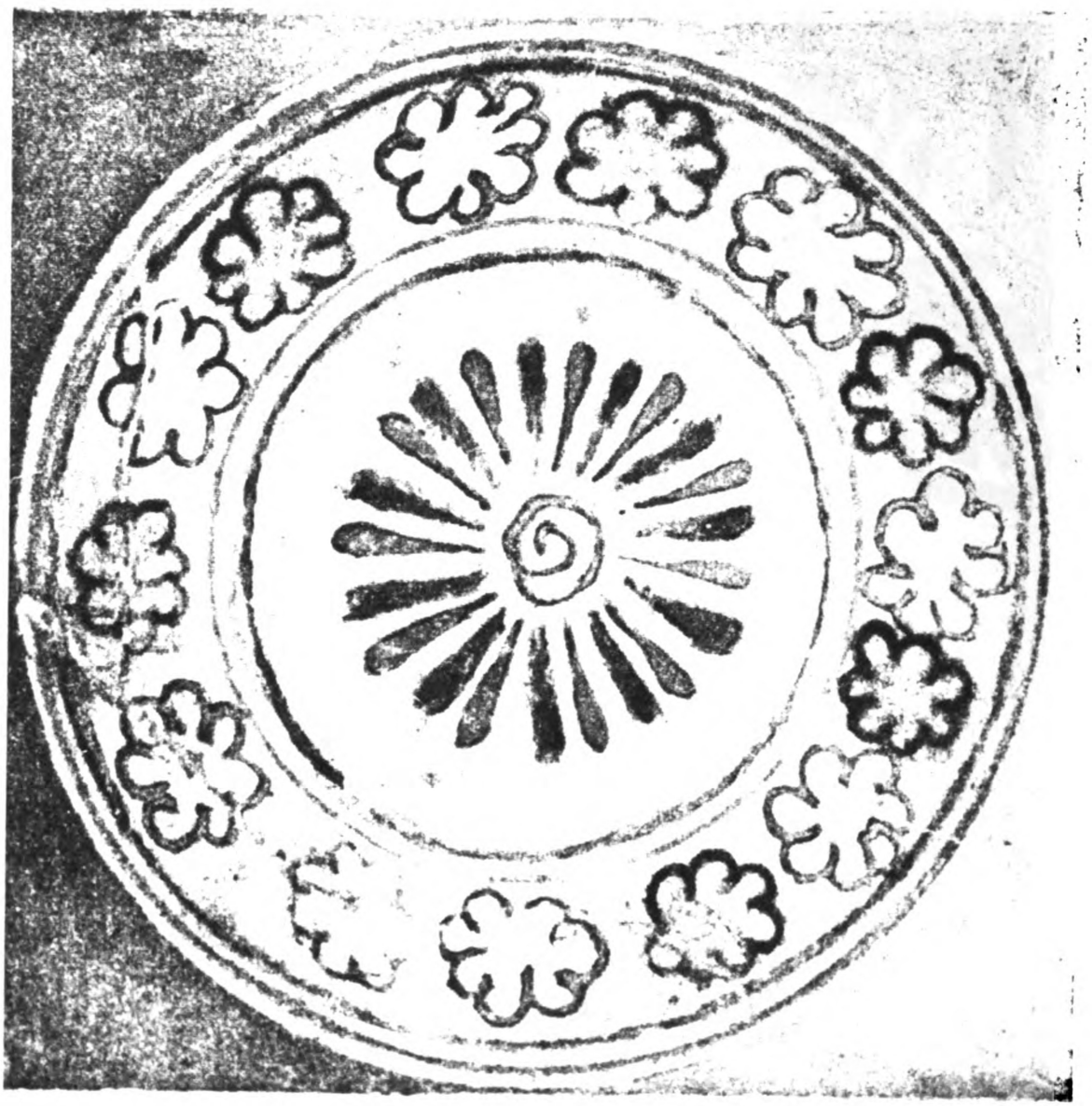

Illustration 4. Pottery Design from Punjab

design itself can be used separately, or a spray of the center of the flower pattern from the plate can be designed for fabric with various mingling of hues to create interesting pattern and color effect in a room, Illustration 5, top left. Or by using the petal detail of the central motif, petals of varying sizes showing progression of size from small to large give a very different appearance to the bottom design in Illustration 5.

The border flowers also have many possibilities. To emphasize their simple shape a third dimensional quality might prove very effective, Illustration 5 top right. They can also be used in a border or stripe form either vertically or horizontally to change the proportions of a piece of furniture, or to emphasize the length or the breadth of a room.

Jamdani Design

The design for Illustration 6 is taken from the border of an old Jamdani saris of Dacca, East Pakistan; it consists of three rows of stylized roses, with geometrical foliage patterns, interspersed with large stylized geese. The name of this pattern is "golapchhar." The Jamdanis of Dacca have been famous since Nero's reign in Rome. Delicately translucent muslins were fashionable in Rome under such names as nebula and venti textiles (woven winds) which is an exact translation of the technical name of the Dacca muslin in Bengal.[1] These muslins are still famous today, though they

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[1]Irwin, op. cit., p. 25.

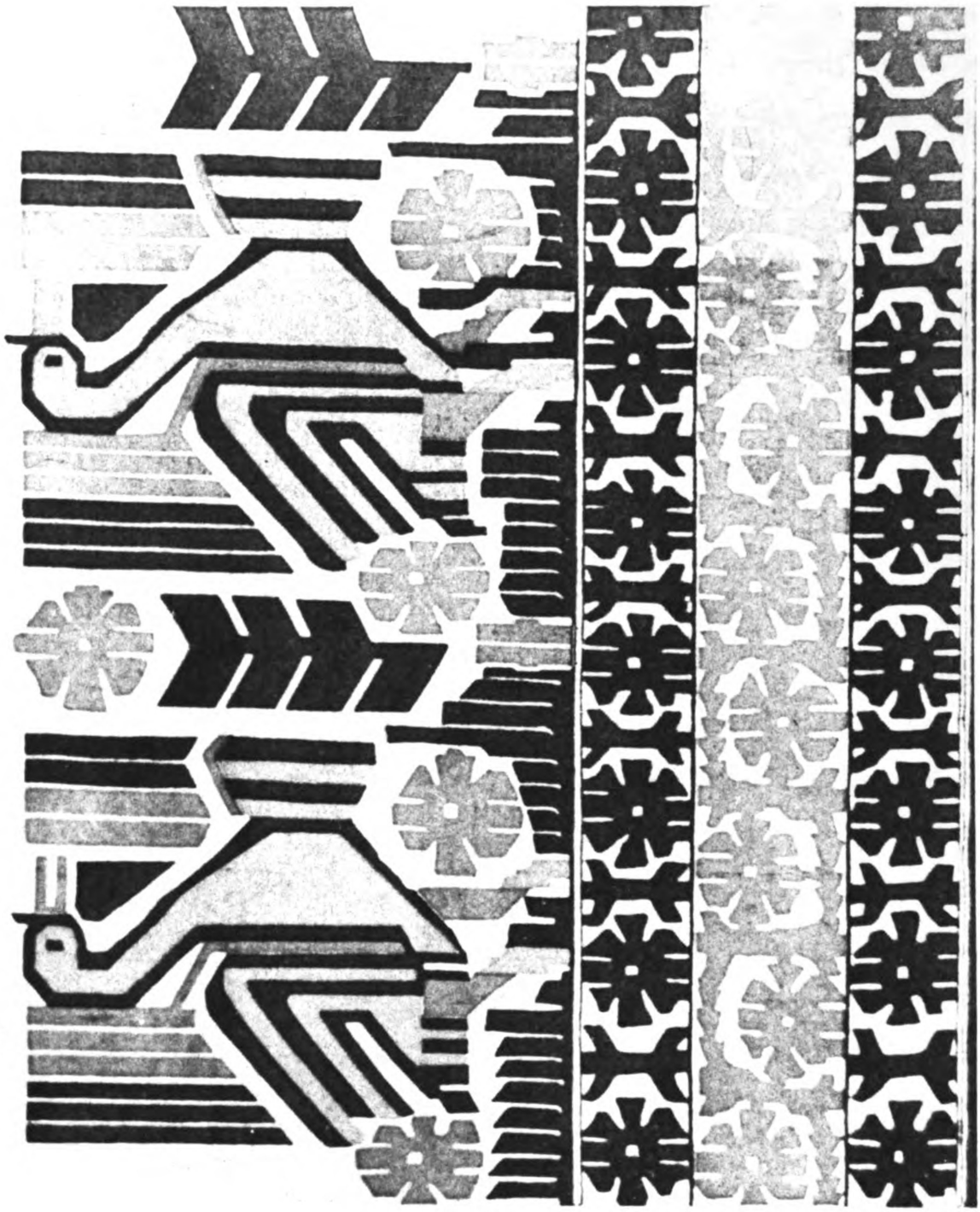

Illustration 6. Jamdani Design from East Pakistan

are not as fine nor are they called "woven air" today, as they used to be.

Jamdani technique is a kind of loom tapestry with the stylized design added to the fine fabric as the weaving proceeds. Simultaneously two weavers are required to work on the loom as the pattern is drawn on paper and is placed below the warp. A number of cut length yarns measured according to the design requirement are arranged along the filling track. In the working of the design two fine pointed bamboo sticks are used to draw each of the warp yarns between as many filling yarns as the size of the design demands.[1]

This design has many printing possibilities. The mere expansion of the stylized floral motifs will give a very interesting and gay atmosphere as shown in Illustration 7. Some simplification of the stylized geese and their rearrangement in block or in checkered form as executed in Illustration 8 could create an effective design for draperies. The design is versatile and simple making it possible to use the various techniques of printing, block printing, silk screening, or stenciling.

Neutral background colors with little accents of different hues emphasize the pattern and form of the fabric in the original; for contemporary use this color pattern could be used for inspiration or a new one developed for the design.

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[1]Mookerjee, op. cit., p. 42.

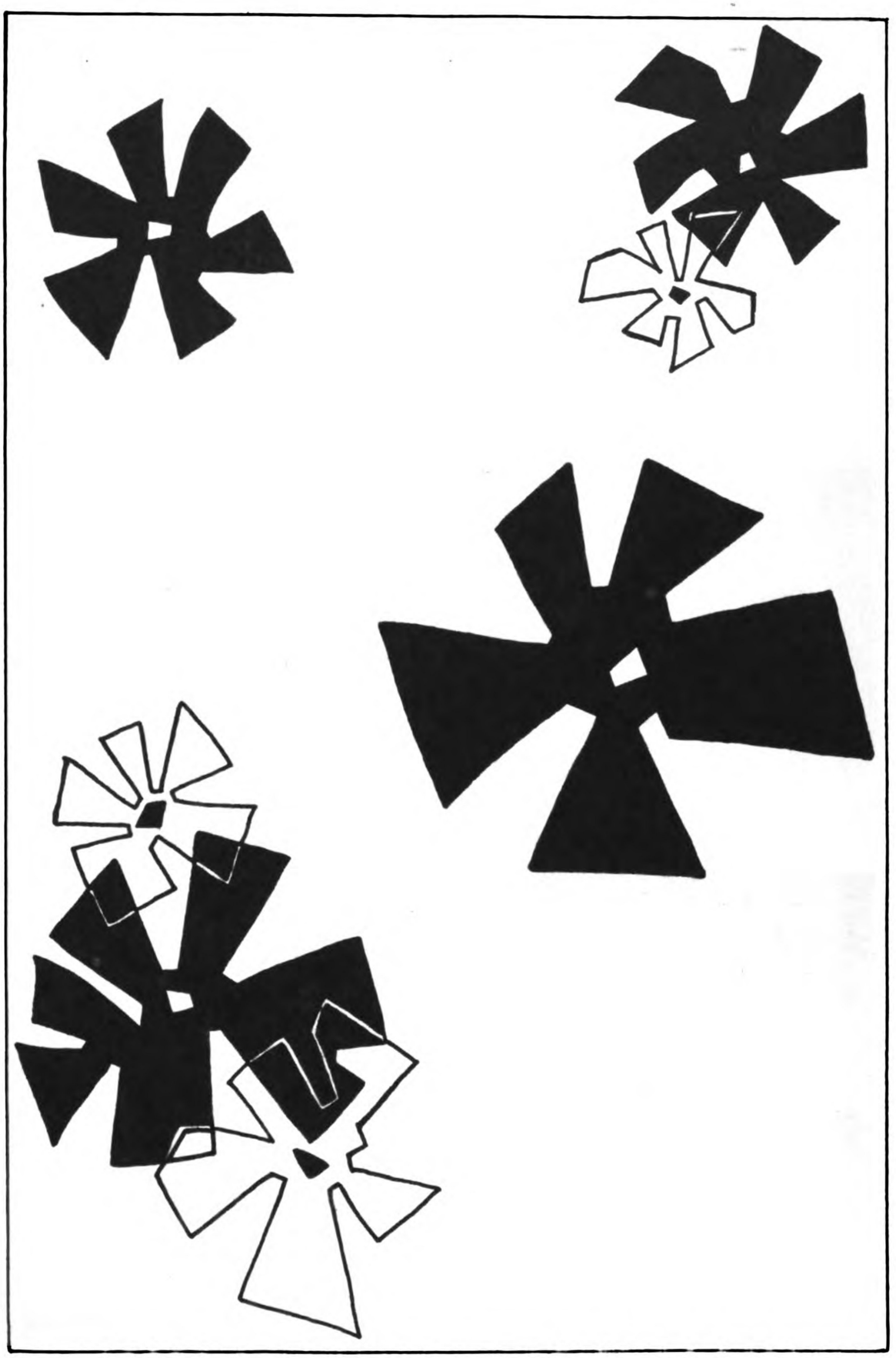


Illustration 7. Adapted Floral Design from Jamdani

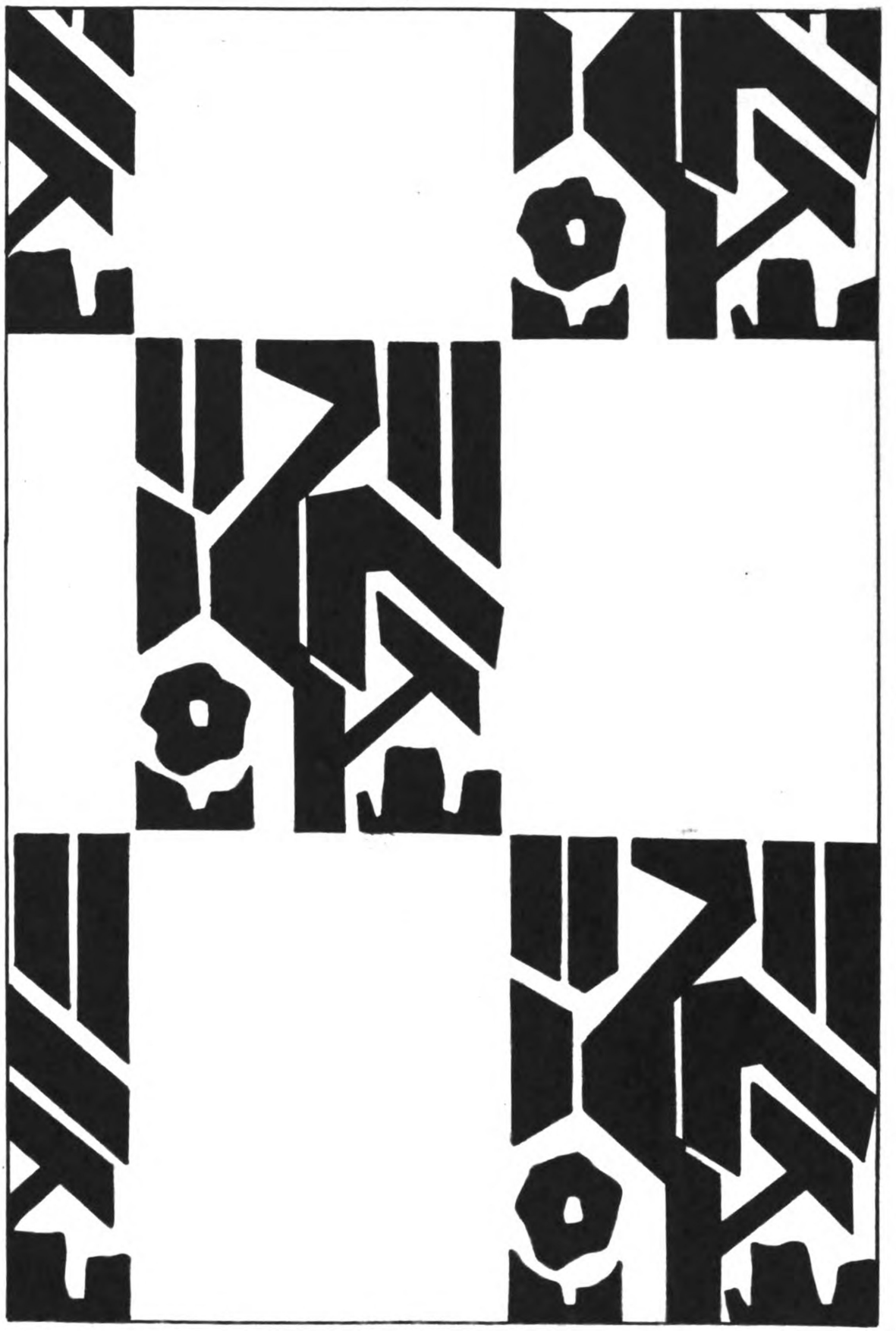


Illustration 8. Adapted Geese Design from Jamdani

Khes Design

Khes is the name of the fabric; the design is from Multan in West Pakistan and is used mainly for bedspreads or bedding. The original Khes is usually a double length bedspread. In weaving, a complicated technique is employed using double warp. By setting up the loom with two colored warp yarns, the color scheme on the face and back of the fabric can be made different creating a reversible bedspread. Two designs are used in the Khes photographed, Illustrations 9 and 10; it has different color schemes on the two sides. One of the double warp yarns is usually black, the other white; or the white may be replaced by yellow, brown, red, or a green for the second warp yarn. In black and white, which is most popular and least expensive, the filling is also of the same colors. With other hues in the warp, the filling yarns are also different on either side.

Designs are usually geometric with a bordered design along the selvages and at both ends of the Khes. They are always woven in cotton. This technique can be very successfully used for upholstered fabric at reasonable cost. These geometric designs have many possibilities for adaptations in printing (see Illustrations 11 and 12). Simplicity in line and frequent repeats of the motif can be utilized through printing for unusual drapery fabrics.

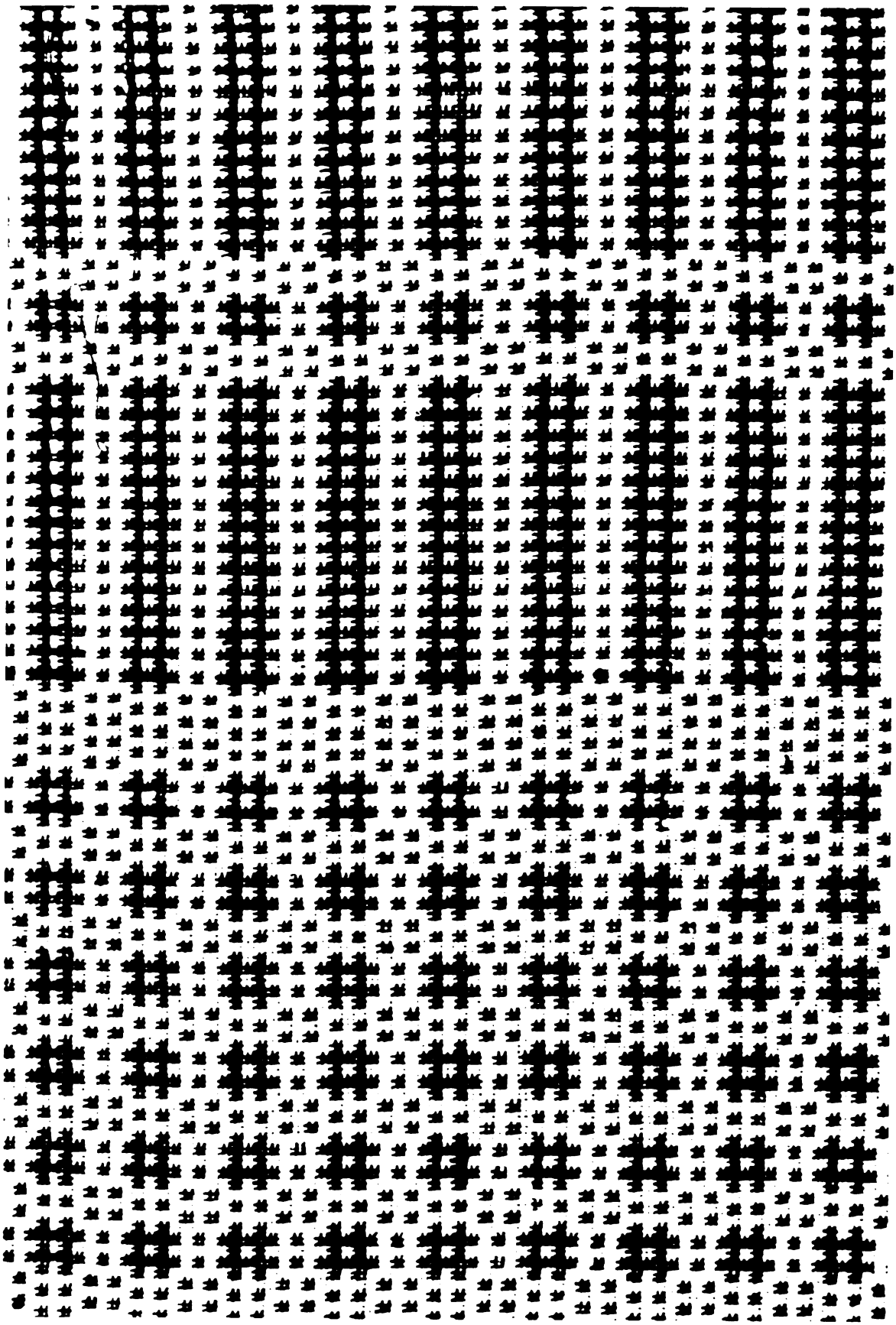


Illustration 9. Khes Design from West Pakistan (Negative)

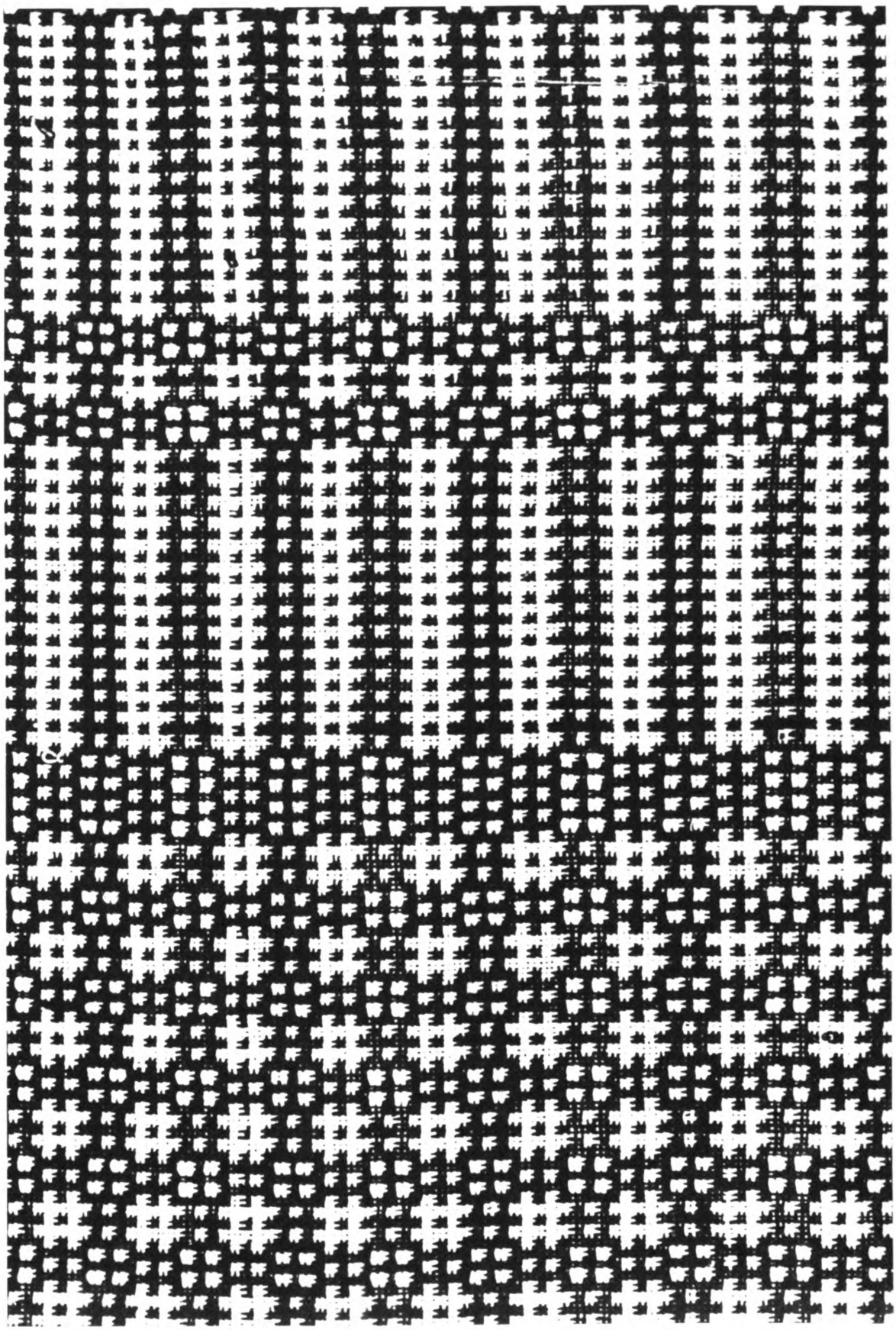
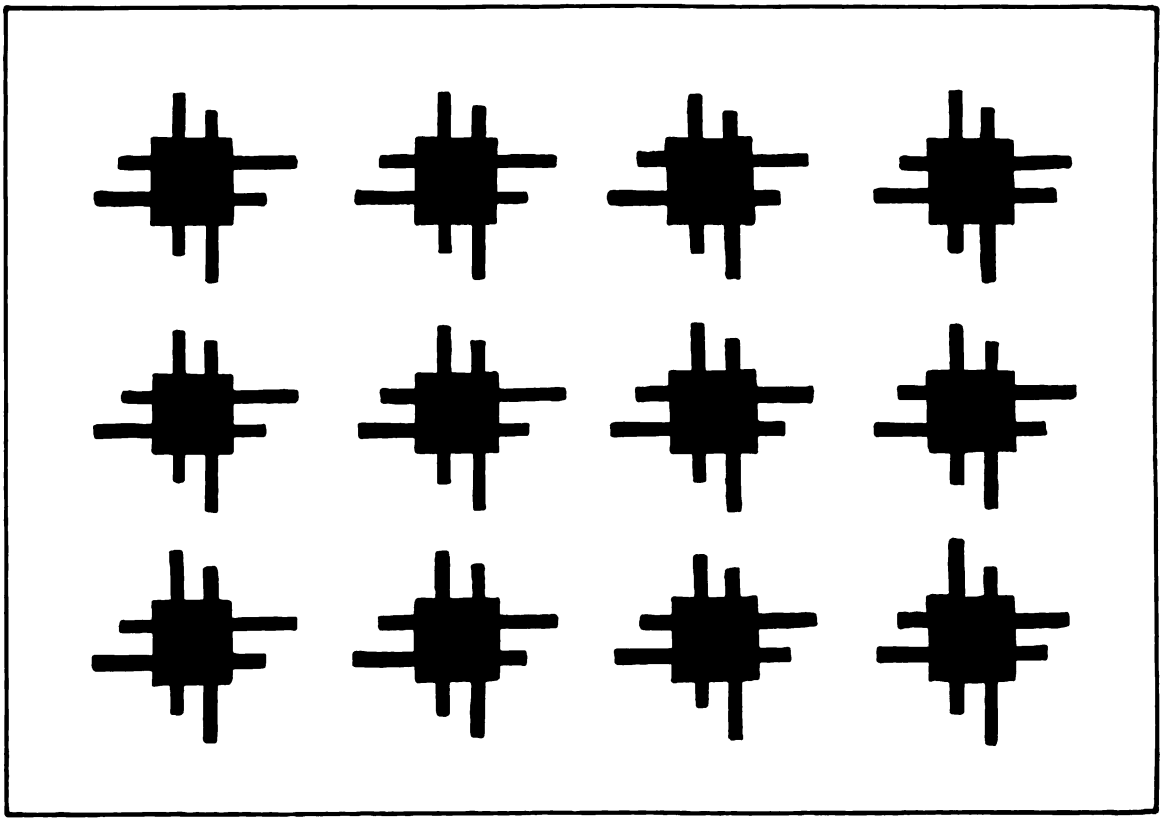


Illustration 10. Khes Design from West Pakistan (Negative)



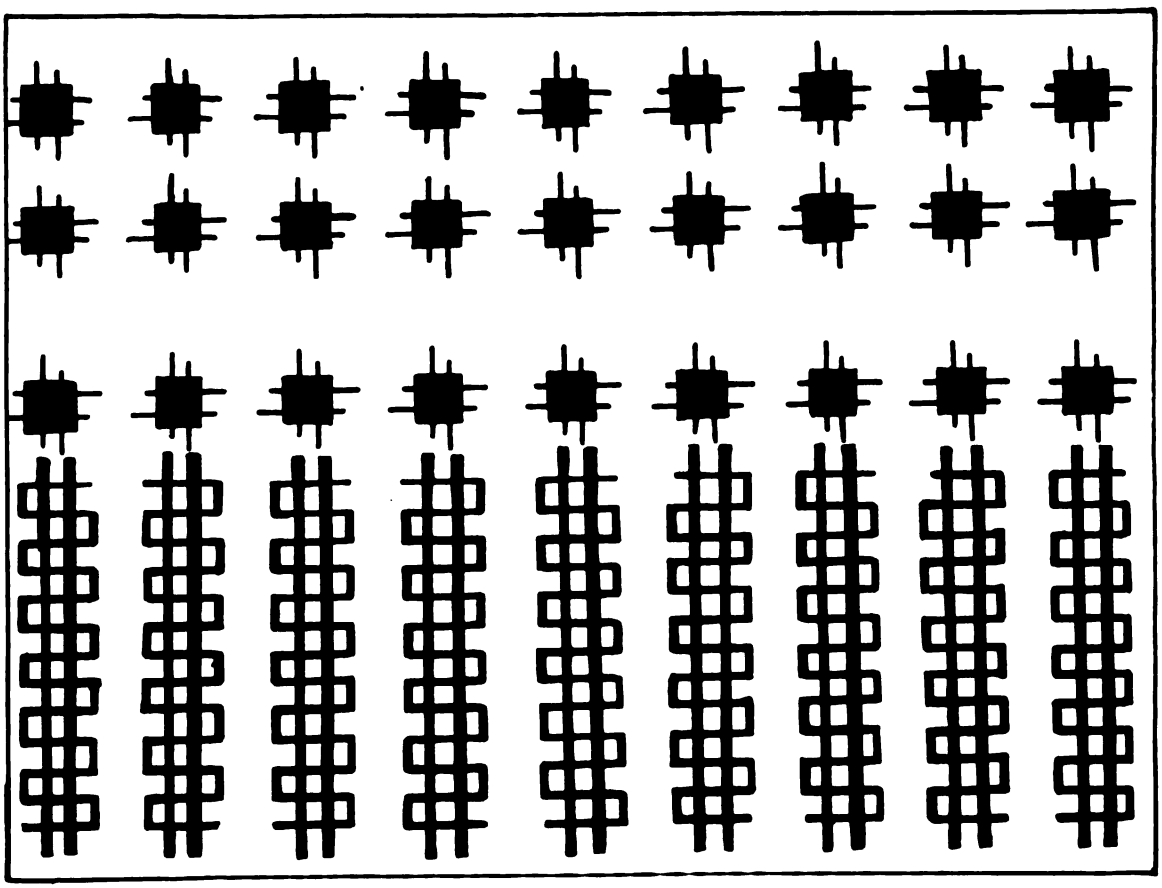


Illustration 11. Adapted Design from Khes (Positive)

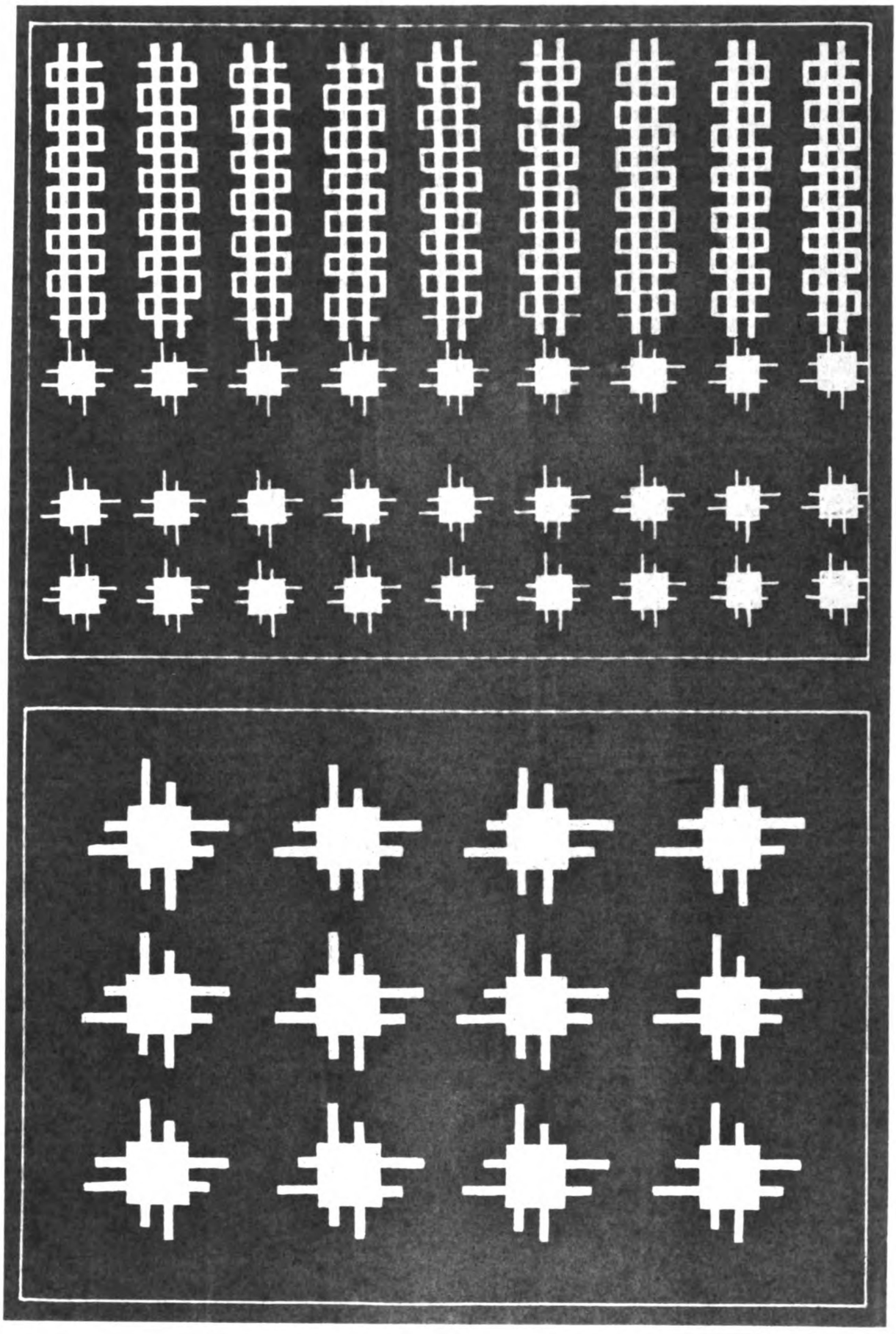


Illustration 12. Adapted Design from Khes (Negative)

Turanj Design

Turanj or the western version paisley design is more than two thousand years old. This design is still very popular in Indo-Pakistan and also with the American fabric designers. The Spring issue of American Fabrics, 1951, is devoted to this "Authentic Kashmiri design which after five thousand years have come to be known as Paisleys."[1] According to them, turanj or paisley is an answer to creative starvation. Even today it is not difficult to find a fabric with paisley design in the American markets. In Pakistani markets this design is always, and has always been, present, especially on Kashmir shawls.

In Kashmir the designer, called a Naquash, after spending months in composing a pattern, gives the design to the Kahan wool or key writer, who after drawing and writing symbolic directions, gives it to the weaver. The weaver then weaves the design.

Unsuccessful attempts were made by many European countries to copy these shawls until 1800 when Mr. Paterson in Paisley, town in Scotland, wove the first Indian shawl.[2] Hence the name paisley originated for this particular design.

The turanj or paisley design used to be woven into the fabric in the early days, but now embroidery has replaced weaving. The first embroidered shawls appeared in the nineteenth century.

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[1] "Portfolio of Paisleys," American Fabrics, vol. 17-20 (Spring, 1951), p. 2.

[2] Ibid.

The original turanj design for this study, Illustration 13, is taken from a hand embroidered Kashmir scarf made in Pakistan.

This design has thousands of adaptive possibilities, both for hand and machine weaving as well as printing. The pine cone with its delicately turned and twisted branches sometimes can lead to many other imaginative designs. The outline form of this simplified motif when repeated in different directions and interesting positions on the entire field of the fabric can create many new designs.

Many geometrical designs can be developed from this motif if it is joined intelligently, thereby giving it an architectural effect which can be used in grills as well as in the printing of fabrics.

Paisley designs can be stylized with simplicity and functionalism in printing and weaving; they can be printed with equal success, as an over-all repeat, as a border, as horizontal, vertical, or diagonal stripes, and in combination with other harmonious shapes. The combined floral and foliage design can be stylized and used with the pine cone motif to produce a stylized border design. Related color schemes inspired by the traditional Kashmir shawls are also handsome for printing purposes.

For this study two methods of stylizing this motif are used. The one in Illustration 14 is rigid and geometrical, and the other, Illustration 15, has movement and flowing lines with a traditional touch yet with a contemporary feeling.

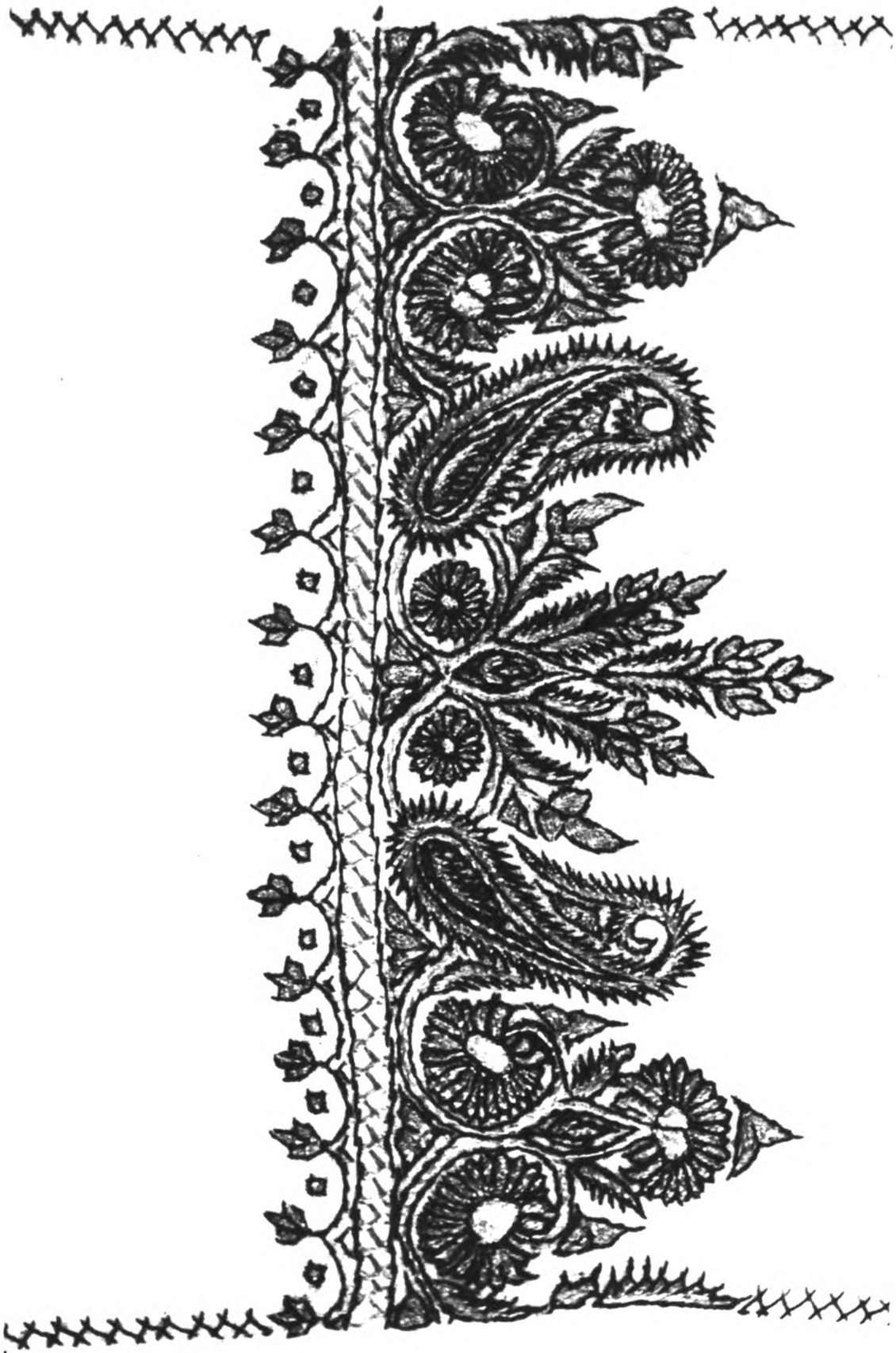

Illustration 13. Turanj Design from Kashmir

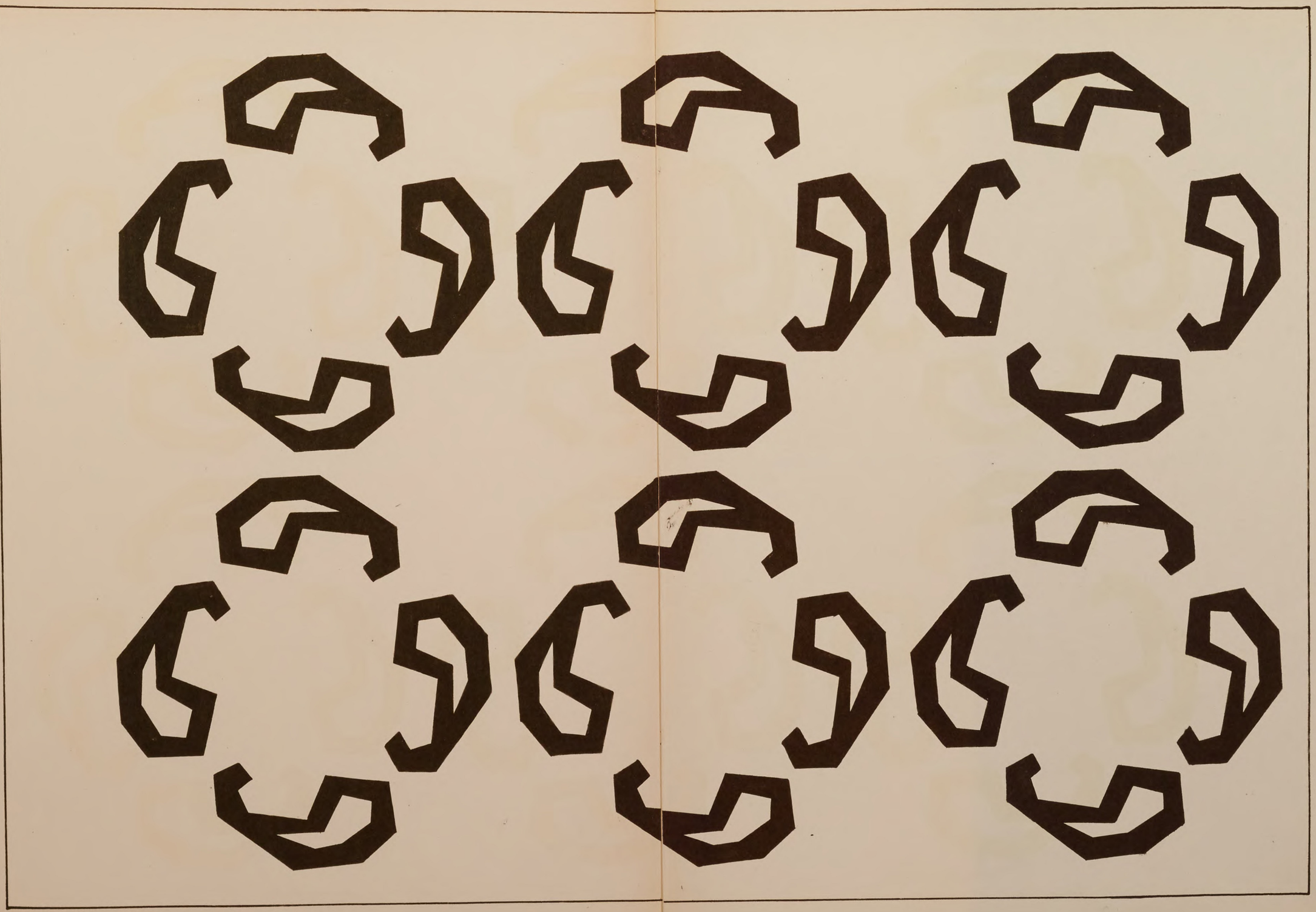

Illustration 14. Adapted Geometrical Turanj Design

Illustration 15. Adapted Turanj Design

CHAPTER V

DESIGNS FOR URDU SCRIPT

Illustration 16 and other Arabic inscriptive designs are a source of inspiration, which have given birth to the idea of textile designing from Urdu alphabet which is actually based on Kufic scrip. Islamic art and architectural design forms show numerous examples of inscriptions from the holy book, Quran, which appears in almost all the historical Muslim monuments and tombs of the monarchs. These inscriptions were also woven in textiles used for the tomb cloths.

Urdu is a very popular language of Pakistan and is one of the national languages; it is also spoken in many parts of India.

The alphabet is beautiful and has very interesting forms, shapes, and line quality. These letters can be stylized into many unique shapes for decorative purposes in different arts and crafts.

The first design in Illustration 17 is based on the letter "Seen" or "س" which is equivalent to the letter "S" in the English language. This letter is stylized in Illustration 17, with the block printing technique, and by using a two-color process a three dimensional quality has been achieved. The design can be produced by weaving, silk screen,

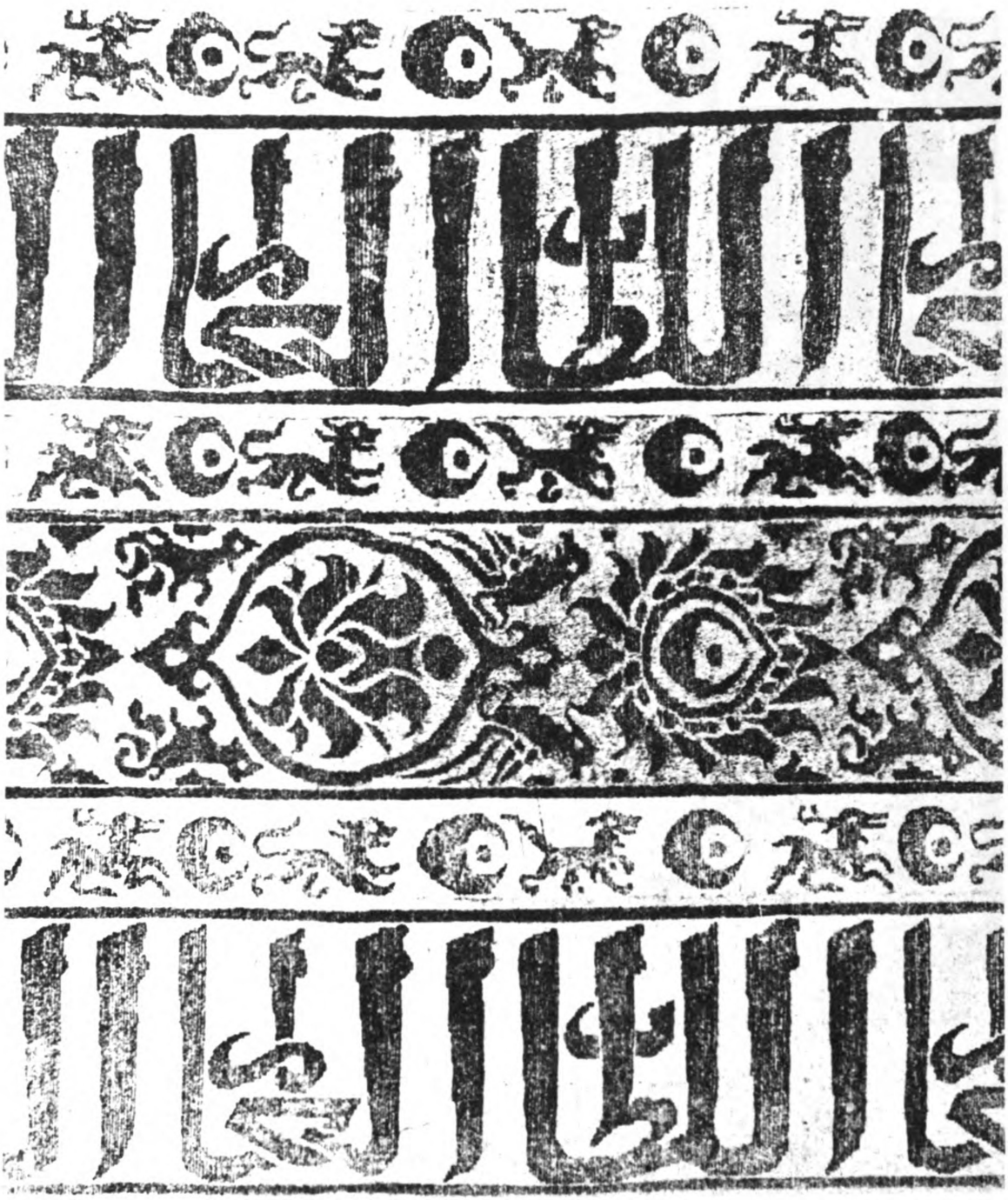

Illustration 16. Arabic Inscripted Design

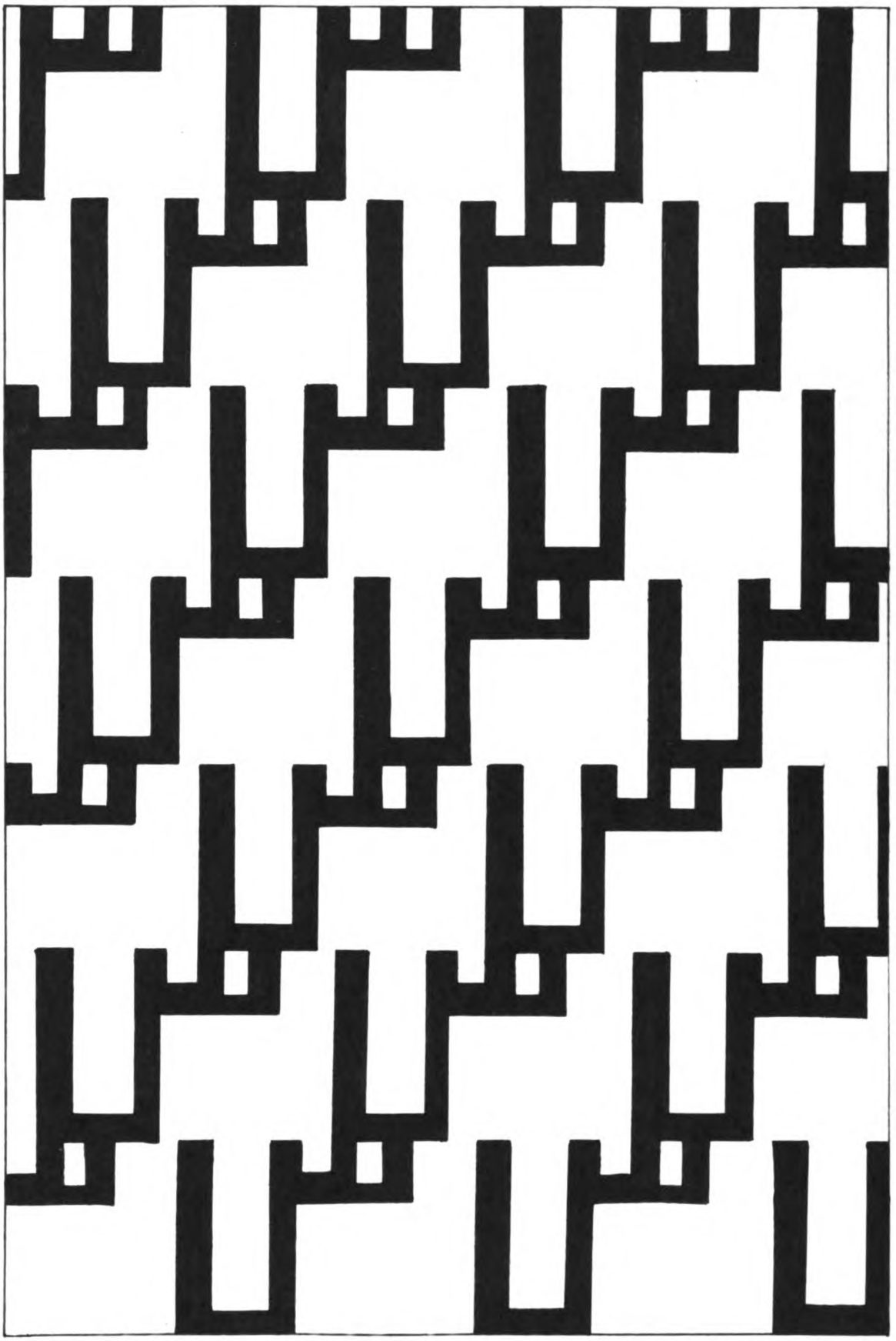

Illustration 17. Design from Urdu Alphabet-Letter Seen

or stenciling techniques. Also, architectural grills can be made in this design.

The second design, Illustration 18, is taken from the letter " م " "Meem," which sounds like the letter "M" of English. The letter is stylized in a traditional style, yet it possesses all the qualities for suitability in a contemporary home. This design could be very successfully used as a room divider when printed on sheer fabric.

The third design, Illustration 19, is taken from the letter "ك" "Kaf" or "K." This can be printed in stripes for draperies to give length to a room, or an over-all print of this design could be very effective. The stenciling technique was used for experimentation using this design.

The fourth design, Illustration 20, is from the letter " ه " "Hay" or "H," and the fifth design, Illustration 21, is taken from the letter "ف," "Fay", or "F." These designs can be easily woven and have possibilities for adapting to any printing technique effectively.

The motifs can be applied in stripes either vertically, horizontally, or diagonally. They can be used in borders or an all-over spray on the entire field of the fabric. To give a personal touch an individual could have draperies with the design based on the first letter of his or her name.

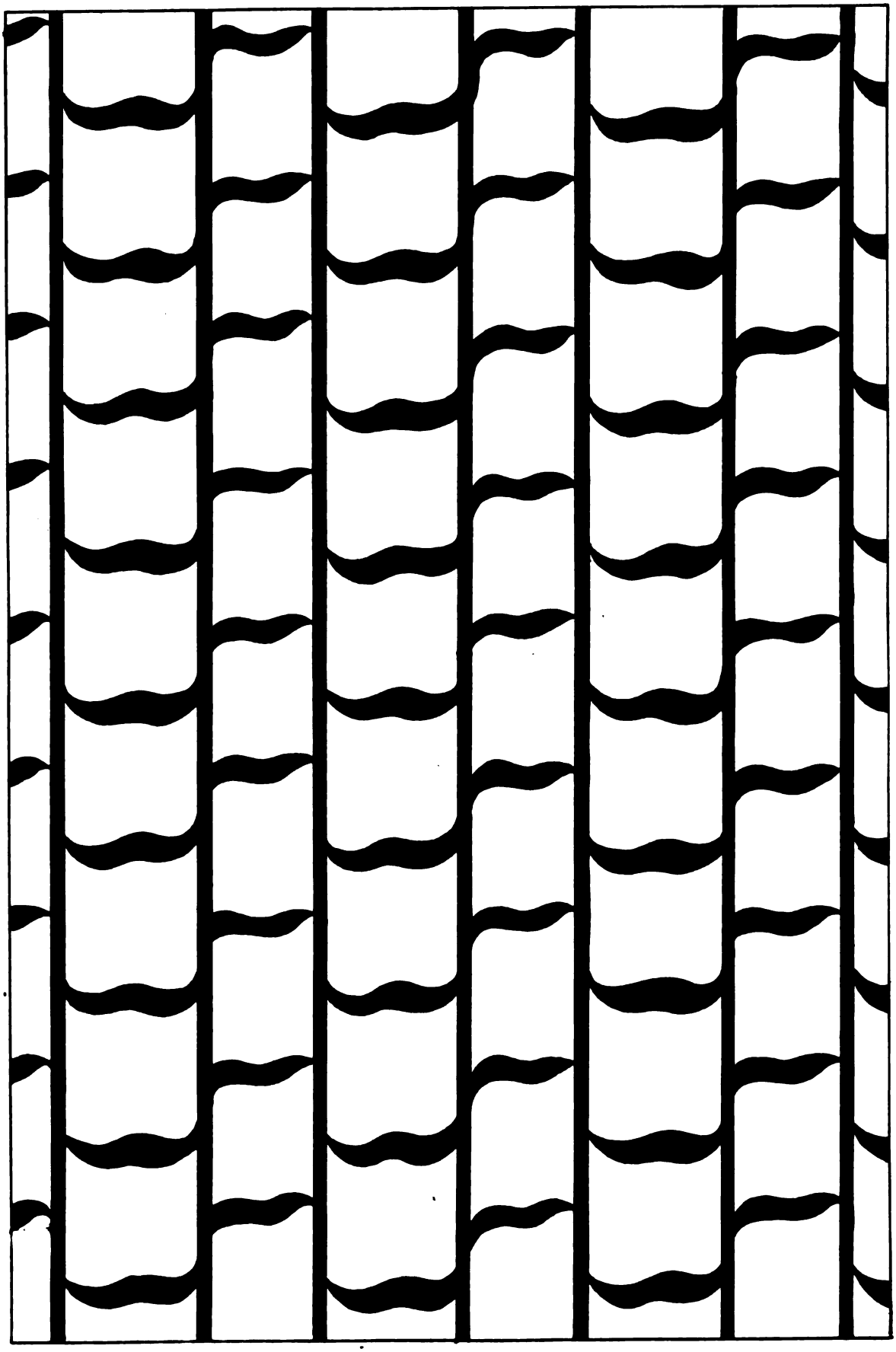

Illustration 19. Design from Urdu Alphabet--Letter Kaf

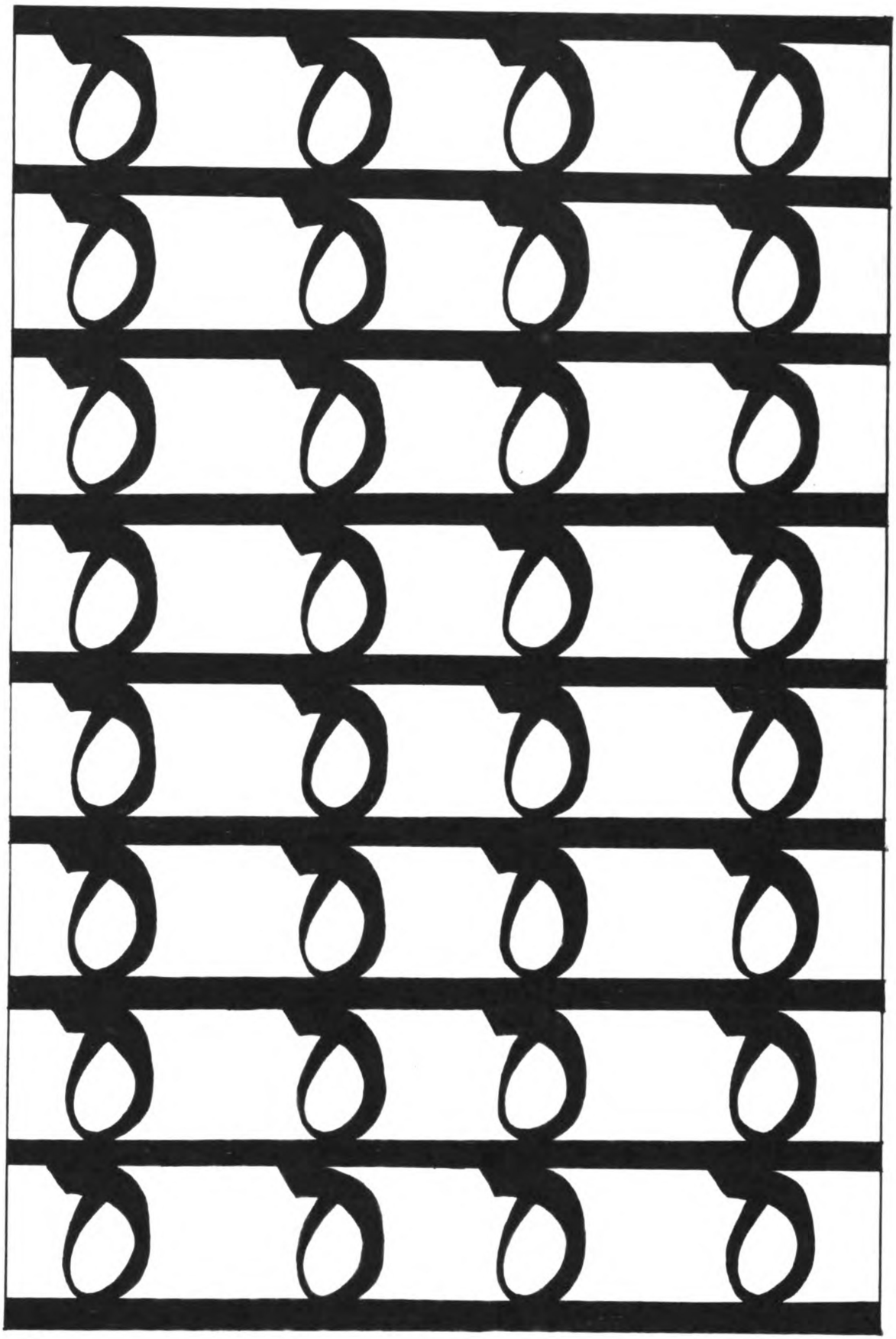

Illustration 20. Design from Urdu Alphabet--Letter Hay

CHAPTER VI

TECHNIQUES OF TEXTILE DECORATION USED IN EXPERIMENTATION

Weaving

The meaning of weaving as described in Webster's Dictionary is (a) "to make (a fabric) by interlacing threads or yarns; make on a loom, (b) to form (threads) into a fabric." Although the origin and development of this skill is a subject on which authorities differ, the skill of weaving has been developed since remote antiquity. According to some authors felting was the first method used by man. The fact that the wool of animals became matted together with dampness, body heat, and pressure probably suggested this process. Other authorities believe that weaving or braiding originated first, as man perhaps imitated the interlaced palm leaf plants. Many anthropologists feel that the weaving technique was invented and developed independently in various parts of the world, because in the archeological excavations all over the world spindle whorls and other weaving tools have been discovered.[1]

The skill of weaving is very ancient in Pakistan; craftsmen still using the most primitive looms are producing

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[1]Birrel, op. cit., p. 14.

fine, beautiful, and useful fabrics. The Industrial Revolution and the advent of the machine affected the Indo-Pakistani people as it did the craftsmen in many European countries. Many professional weavers left their hand looms in order to earn more by working in factories.

The Pakistan government is taking an interest in the revival of this craft. To accomplish this great task much concrete work and planning is being carried on.

The author is interested in improving the weaving equipment and physical conditions of the work areas, to arouse interest of the younger generation and to facilitate learning of this art.

Weaving can be defined as a method of fabric construction in which two or more sets of yarns are interlaced at right angles. The basic weaves are plain, twill, and satin which have been known to mankind since before the Christian era. These simple weaves require only two sets of yarns; many more complicated developments are modifications of these basic weaves.

Other old methods of fabric construction still used and worth mentioning, include felting, braiding, and knitting. The method used for experimentation in this study was weaving,[1] which is discussed in detail in the following pages.

The criterion for the selection of a loom is often the number of harnesses which may vary from two to thirty or more.

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[1]Ruth Overman and Lula Smith, Contemporary Handweaving (Ames, Iowa: The Iowa State College Press, 1958), pp. 34-45.

A larger number of harnesses improves the pattern possibilities of the loom. For beginners a four harness loom is adequate for fulfilling creative desire. The most important considerations in selecting a loom include the following points:

1. The loom should be constructed of sturdy seasoned wood to prevent warping and to withstand the impact of constant beating during the weaving procedure.

2. Tie ups or cords, chains, or wires should be easily connected without stretching or tangling, and should also be disconnected easily.

3. For threading ease the treadles should have sufficient leverage.

4. The beater should be heavy and adjustable to accommodate different heights and lengths of reeds, and for extra force.

The different parts of the loom are:

1. The frame supports the two revolving rollers, the warp beam and the cloth beam. Warp is wound on the warp beam located at the back. (Larger diameter warp beam prevents the excessive piling up of warp yarns.) The cloth beam at the front of the loom receives the fabric as weaving proceeds.

2. The harness includes the heddle frames, the lams, and the treadles. This mechanism creates the shed. It is suspended in between the front and back of the loom by means of cords or chains. The harnesses support the heddles, and are used to elevate or depress selected sections of the warp

in sequence. The harnesses may consist of a frame or two sticks, one placed directly above the other. They are controlled by the lams and the lams are actuated by the treadles.

3. The heddles are suspended between the harness sticks. They have a center eye made of strong cord, wire, steel or aluminum strips, through which the warp yarns are threaded.

4. Lams are the wooden arms which run parallel to the heddle frame; they are attached to the frame on the left side and act as connecting links between the harnesses and the treadles. More than one harness can be connected through lams to a treadle.

5. Treadles lower and raise the harnesses and are foot controlled. They create the shed and control the warp yarns.

6. The beater or batten can be either suspended to form an overhead framework which swings as a pendulum, or is attached to the base of the frame from where it pivots.

7. The reed consists of a metal frame with a series of metal strips called dents equally spaced throughout the frame. The reed is held in place by the beater.

The equipment required for preparing the warp includes: (1) A spool rack for holding the spools of yarn. (2) Swift for winding the yarns from the skeins. (3) The reel which will wind three or more yards per revolution. The pegs for making the cross can either be at the top or the bottom. The cross is made by winding the yarns alternately over and under the pegs to form a figure eight. This is done to keep

separate warps in an orderly sequence, and to insure proper arrangement when the warp is wound on the beam. (4) A paddle made of wood, metal, or plastic is used when weaving with more than five yarns. The holes are numbered and each color thread can be passed through these holes, so that no entanglement results.

The spreader is a long, soft wood stick about three inches wide with nails placed one inch apart. To install the warp on the loom, the spreader is attached to the back of the frame with masking tape. The warp yarns are distributed between the one inch nails according to the width of the warp desired. The base sticks which maintain the cross, also rest on the same loom frame stick. These sticks are inserted in the openings on either side of the cross, and both ends are tied with strings. These should be kept in place until the warp is threaded.

The warp beam sticks which are normally one-fourth inch thick and one or one and a half inches wide, are inserted as the warp is wound around the beam to prevent piling of warp and maintain warp tension. The reed hook which is similar to a crochet hook, is used for pulling each warp through the heddles and the reed.

The warp yarns are tied evenly with equal tension onto the stick attached to the cloth beam to ready the loom for weaving.

The filling yarns are wound on the bobbins neatly and evenly with the help of bobbin winders. These bobbins are

then placed between the warp yarns according to the design and the color scheme, and weaving proceeds.

Linoleum Block Printing Technique

The block printing technique is believed to have been first invented by the Chinese in about the eighth century, A.D.; the Chinese used it for paper printing. Early Egyptians and Indians of the Indus Valley civilization are believed to have used block printing on fabric before or about 400 A.D. Wooden blocks are still used for commercial block printing in Indo-Pakistan but linoleum blocks are used by the beginners and the hobbiests. Lionoleum blocks were used for experimenting in the study.[1]

Required equipment included the linoleum block, a set of linoleum carving tools, oil base paint or block printing ink, a sheet of glass about twelve inches long, a brayer, a mallet, clean rags, newspapers, and paper towels. Normally cotton fabrics are recommended for block printing, but silk, and rayon mixed with cotton also yield satisfactory results.

The design for block printing should conform to the size of the block. Bold, simple, and direct designs with interesting contours give better results. Patterns varying in sizes, textures, hue, light and dark values add sparkle and variety to the finished product.

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[1]Francis J. Kafka, The Hand Decoration of Fabrics (Bloomington, Illinois: McKnight and McKnight Publishing Co., 1959), p. 67.

Linoleum blocks used for block printing are made from heavy battleship linoleum free from blemishes; they are cut according to the desired size, and are glued to pieces of plywood. The cover of the block should always form a right angle position for stablized printing. Surface wax and other foreign material should be removed with alcohol or light-weight sandpaper, and a coat of white casein paint applied to the surface.

The design is traced on the block with the help of a carbon paper. Another way of tracing is to blacken the reverse side of the design with a pencil then treating this with lighter fluid making a carbon paper. Under strong light the outline of the design can be reproduced on the back side of the paper and then traced onto the block.

The block is then ready to be carved with sharp assorted knives and veiners. Carving should be done very carefully in order not to break or chip design edges. The pattern should be outlined with the tip of a sharp knife, working a little outside the actual outline to avoid narrowing the pattern too much. For larger areas a gouge is used and for smaller areas the veiner. Then the troublesome corners and high background projections are peeled off. A trial print on paper should be made to correct errors.

The block is then flocked to ensure better printing; this is done by applying several coats of varnish made of oil and gold size, and dusting with fine wool flock. The block is now ready for printing.

Before stamping the blocks on the fabric, the fabric should always be washed to remove sizing and to shrink it. For printing, the fabric should be ironed and stretched over a cardboard sheet. When a padded surface is needed, rugs and carpets protected with newspapers and muslin give a springy resilient surface for printing. The areas designated for the placement of the block should be marked accurately with masking tape in order to help in the placement of the block on the fabric.

Adequate paint for the entire printing of the design is mixed to the desired color. By mixing it in a jar fitted with an airtight lid, the operator is assured that sections printed at a later time will be exactly the same color. The consistency should neither be too thin or too thick. Some of the paint is placed on the glass plate. The brayer should make a humming sound when rolled back and forth over this paint. Then the block is covered with the paint from the brayer by rolling it over the block until the paint is distributed accurately. To test the consistency of the paint and for practice several trial prints should be made. If the paint is too thick, the print will appear painted on the fabric; if too thin the lines of the design will not be clean cut. Turpentine or a commercial thinner can be used if the paint is too thick.

The block should be held firmly on the material and tapped with a mallet, first in the center and then on the corners. Pressure can be applied with more success and less

noise by stepping on the blocks either barefoot or with soft buckskin moccasin type shoes.

The stamped material should stand in the air for a few days. To set the color it can be steam pressed by using a presscloth soaked in white vinegar solution, with proportions of four tablespoons of vinegar to one cup of water.

Stenciling of Fabrics by Hand

Stenciling was developed into an impressive art form by the Japanese during the early stage of their cultural history. It can be called a mechanical resist technique. The stenciling device is a sheet of paper or metal which prevents the penetration of the dye into certain areas of the design.[1]

The design motif is cut out of a thin material, either stencil paper or metal sheet. The stencil is then placed on the material and dye is applied to it. The fabric in the cut-out areas takes the dye freely and the areas covered by the uncut stencil or solid areas are not exposed to the dye.

One limitation with this process is the need for all areas of the design to be connected. When whole areas are cut out of the stencil this area drops out of the design. All design areas have to be connected together with ties to keep them from falling apart, thus causing interruptions in the design. The Japanese craftsmen by using human hair have

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[1]"The Printing of Textiles," American Fabrics, nos. 49-52 (Spring, 1961), p. 62.

been able to make almost invisible ties, thus being able to produce stencil designs with more open areas.[1]

In Pakistan stencil printing is used by some craftsmen, although it is not a very popular commercial printing technique. It is an old technique in one sense but is relatively new compared to block printing and other forms of textile decoration. The designer often has to simplify the design due to certain limitations of this technique, thus avoiding intricacy, which suits the objective of this study.

The stenciling procedure[2] is described in the following pages. The required materials for stenciling can be purchased commercially or can be improvised. They are: stencil cutting knife, or single edge razor blade carefully broken with pliers and mounted on a pen holder; waxed stencil board which can be made by coating a good quality bond paper with shellac or melted paraffin and thoroughly drying before use, or discarded film negatives can also be used as stencil paper; stencil brushes and fabric paints.

For colorfast and washable colors, mordants are mixed with printer's ink. To make this mordant twelve parts of turpentine, one part acetic acid, and one-half part of oil of wintergreen are combined.[3] A water soluble mordant can be made by straining egg white through cheesecloth, and then

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[1] Ibid.

[2] Kafka, op. cit., p. 8.

[3] The bottle should be marked "poison."

adding it to tempera colors.

Other supplies needed for stenciling are clean rags, a supply of old newspapers, and cleansing solvents, either turpentine or benzine.

The stencil design should be simple, and the ties should blend gracefully. The design is traced onto the stencil paper, either directly or with the help of carbon paper, then using a stencil knife or razor blade, the design lines should be cut with clean, sharp cut edges. Fuzzy corners and edges will print an imperfect outline of the design. The paint is mixed on a glass sheet. A very small quantity of the paint should be taken with the stencil brush and smeared well on the clean area of the glass. The fabric should be free of starch and stretched flat on a cardboard before starting to stencil on the design.

After placing the stencil on the desired location on the fabric, the paint is applied to the cloth in the cut out areas of the stencil. Firm strokes are used from outer edge of the design outline toward the open area to avoid penetration of paint under the edges. For solid area technique the paint is brushed in until the entire open area of the design is colored uniformly. For shading techniques a color free highlight area is achieved by brushing the paint toward the center of the design, leaving irregular brush strokes.

The stencil is cleaned on newspaper by wiping the color off with rags moistened in solvents. Wiping should be done in the same directions as the brush strokes. Small,

delicate bridges must be carefully cleaned. Brushes can also be cleaned in solvent and then washed in soap and warm water.

After air drying for at least twenty-four hours, steam pressing the fabric will help in the colorfastness of the painted area.

Silk Screen Printing

Silk screen printing is a modification of the stenciling technique. Some limitations of the stencil can be overcome in this method, for example, the bridges or ties to hold the various components of the design together are not required. Fine silk fabric, nylon or metal thread is stretched on a wooden or metal frame. The cut out stencil with the design is attached to the fabric on the frame by means of an adhesive. This frame is then laid on the fabric and the color is squeezed through the open areas of the screen onto the surface.

This fairly new technique was started in the early part of the twentieth century. The first patent for silk screen was issued to Samual Simon of Manchester, England in 1907. The following year in the United States a patent was issued to the New York Reproduction Company. At first the process was used for making posters and signs, twenty-five years later experiments were carried on to adapt this process for other commercial purposes.

It is not known when this process was first applied to textile designing, although France is thought to be the first country to use this technique on textiles. Not many silk screen printed fabrics were seen before 1940.

James and Leslie Tillett, originally from England, started a small factory in Mexico in 1940 using Mexican colors. They printed gay skirts and blouses for tourists using silk screen printing techniques along with hand and block printing methods. The popularity of these fabrics resulted in opening another factory by the two brothers in New York. Later many other factories were opened in the United States and many other countries.[1]

Silk screen printing techniques have not reached Pakistan to date. However, the introduction of this method would be very interesting and rewarding for the craftsmen. Many commercial methods have been invented for employing this technique with the help of automatic machinery, but the author is interested in the simple hand printing method for the benefit of the craftsmen. The following discussion of this method is largely being based on The Hand Decoration of Fabrics.[2]

Supplies and equipment required for printing are: a stretched frame, a squeegee, a supply of textile paints,

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[1]Birrel, op. cit., pp. 438-439.

[2]Kafka, op. cit., pp. 102-127.

stencil paper, cleaning materials and cutting tools for stencil. A squeegee can be purchased ready made; they are sold by the inch and should be one inch shorter than the width of the inside frame. Window cleaning squeegee can also be used as a substitute. The mesh fabric always called silk regardless of the fiber content, is also available in cotton organdy, taffeta, nylon, and Dacron. Thread count of the fabric is the criteria for selection; the finer the mesh the lighter will be the pain deposit on the fabric. For textile printing heavier deposit of paint is required. Number 12.x.x. mesh fabric is recommended for the beginners.

The frame can be either purchased or constructed at home. One and one-half inch square wood or any convenient lengths, preferably 10 by 14 inches, can be joined with butt joint using ordinary nails. All four corners should make exact right angles. The mesh cloth is then attached either by a stapling gun or by using aluminum or copper tacks which will not rust. The weave of the material should run parallel to the frame and the cloth should be stretched as tight as possible, like a drumhead. The fabric or screen as it is now called, should then be washed to get rid of sizing. Strips of gummed tape are attached to all four inside edges and the inside corners to seal the edges of the frame before it is dried. Gummed tape is then attached to the outside of the frame to protect the raw edges of the mesh cloth and to cover the staple or the tacks.

After the frame is dried a coating of shellac is applied to the paper surfaces to keep the tape intact over the wooden frame. When the shellac has dried the frame is ready for printing.

The design is traced on the waxed stencil board to be cut out with a razor blade or stencil knife later. Small pieces of the design can be adhered directly to the screen with a thin glue, but large areas are cut out of a full stencil sheet. The cut out sheet is attached to frame with the help of adhesive tape.

For many printings a shellac stencil is more suitable. This can be prepared by applying an even coat of shellac to bond paper or sturdy wrapping paper. The sheet is dried in a hanging position (excess shellac that runs to the lower edges can be trimmed off with scissors). After cutting the design from this paper, the sheet is adhered to the screen frame by ironing it on the screen. The edges are secured by adhesive tape.

The frame with the design thus adhered to the screen is then placed on the fabric which has been washed and ironed. A small amount of paint is poured on one end on the inside of the screen and with the help of a squeegee it is squeezed through the mesh cloth onto the fabric. Before each repeat the screen should be cleaned with a solvent to remove all traces of paint, thus avoiding clogging of the mesh cloth.

The method used for experimenting purposes in this study was similar to the one discussed above, but instead of

waxed stencil board, a special stencil material called "lacquer film" was used. A thin sheet of lacquer is attached to a slightly oiled backing paper, sold under such trade names as Nu-Film or Pro-Film. These sheets are slightly transparent and are available in amber, green, and blue. The cutting technique is similar, except that the lacquer only is cut with a stencil knife.

The lacquer is then attached to the screen by using a specially prepared lacquer thinner which adheres the lacquer film onto the screen. The backing paper is peeled off carefully, and the printing procedure is carried out in the same way. The printed fabric after complete drying is heat-set with a warm iron and later is laundered in lukewarm water and mild soap.

To use the same screen again for another design the lacquer film should be very carefully dissolved with lacquer thinner. To preserve the screen for later use it should be cleaned thoroughly by moistening in either turpentine or kerosene and removing all color with a soft cloth. The squeegee also should be cleaned immediately after use, otherwise there is danger of the screen and the squeegee being damaged and made unusable.

CHAPTER VII

APPRAISAL AND SUMMARY

Textile history reveals man's expression of creativity from remote antiquity through textile design. There is a great versatility in this art. No two artists wish to repeat either their own or copy each other's designs. This desire to create something new has led to high attainments as artists have reached peaks of creative endeavor. For these reasons it is not difficult to identify the textile fabrics of a designated reign or period belonging to a particular area or part of the world.[1]

The historic textiles of Indo-Pakistan have an outstanding place of their own. Today they enjoy superiority and individuality in design quality while offering a very wide variety of design. History also reveals the borrowing of designs by one culture from another, with adaptations and new interpretations which have given rise to other new expressions. This has been particularly true of the Indo-Pakistani textiles since the Indus Valley civilization. In

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[1]Birrel, op. cit., p. 13.

spite of many, many different cultural influences and assimilations expressed through the arts and crafts of Indo-Pakistan, the textile arts along with other arts have retained their individuality. In fact, these cultural assimilations have enhanced beauty offering a wide variety. Even today they can serve as a source of inspiration in creating new designs to suit the needs of contemporary taste.

The theoretical approach to this study is supported with a review of the historical development of Pakistani designs. Several Pakistani design motifs have been selected and adapted by looking at them from a different angle and giving them a new look for use in western countries.

Textile designing like any other designing should come within the boundaries of the principles of good design. These design elements and principles are essential qualities. In the machine age not only the aesthetic but also the functional design, suited to a definite purpose, is most important.

In this experimentation with the traditional designs, care has been taken to achieve these qualities in the adaptation. The motifs are repeated in such a way that the observer's eye tends to look all over the surface and not focus on one spot. In this way the fabric is treated as a whole and the design becomes part of the fabric. Another important consideration is the scale of the design motifs; they should look appropriate when observed from a distance as they are arranged in panels, rows, borders, isolated

areas, and in all-over patterns.[1]

The printing techniques restrict the development of designs. Printing by the stenciling method is a relatively simple process which can be used on plain or on textured fabrics for variety. Interest can be achieved through variation of shape and color, and at the same time light and dark areas can be achieved through shading.

In block printing a more detailed design can be used for printing, though it does not offer any possibility of acquiring fine line quality, unless metal strips are attached to the block. Contrast of light and dark value can be achieved by stamping the block a second time, or slightly moving the position from the first, giving the print a third dimensional quality.

In contrast, the silk screen technique has many advantages over block printing and stencil printing. Line quality, variation of shape, color and texture, all can be achieved by using this technique which is new and has not been introduced to the Pakistani craftsmen.

Weaving, on the other hand, needs an altogether different approach. Difficult compositions require versatile weavers to handle the design. The skill of Pakistani craftsmen makes it possible for them to weave any designs; they only need some guidance in the adaptation of their designs

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[1]Kenneth F. Bates, Basic Design (New York: The World Publishing Company, 1960), p. 71.

to weaving new forms. Pakistani weavers should be encouraged not only to weave very fine silks, but to use a variety or a combination of coarser yarns to give a textured quality to their fabrics. In this way they would be fulfilling one requirement for drapery and upholstery fabrics for contemporary interiors.

Pakistani craftsmen need to experiment with the loom and learn how to produce designs for mass production on power looms. When the craftsmen and the machines come closer to each other, and these craftsmen learn to mass produce good contemporary designs, better products will be available for the international market. In order to arouse interest and facilitate the learning of this art, the working conditions of the work areas and equipment has to be improved. The scattered craftsmen in Pakistan should be brought under one roof, so to speak, in order that they could produce crafts which would be interrelated and suitable for use in contemporary homes: for example, one design idea to be used in weaving, printing, tiles, or grills. By combining and coordinating the architectural motif in textiles and crafts for use in the interior, unity in design throughout the home may be achieved without monotonous feeling.

In summarizing this study, it seems appropriate at this point to quote Alexander Girard who writes: "Designs that are fresh, interesting, and different are not achieved if fresh, interesting and different is the prime objective."

He further states, "Good design derives from the wish to do just that."[1] He thinks that the Indian textiles are the best example of this urge to create good designs and that they reflect a powerful delight and understanding of the problem.

The enormous wealth of the Indo-Pakistani designs is not enough for artists. The mere copying of the past does not solve their creative impulses, because the present has changes. The past was conditioned with many factors that are vanishing due to industrialization and other important factors like ease in world communications, development of technology, and freedom from traditional bondage.

Human beings are never satisfied with one thing for a long time. They must be creative. This is an inner urge; they want to forget the burdens of life by finding liberation in art.[2] Creativity can be defined as the ability to relate things which were not related previously, or to look at things with a fresh eye. One has to be broad-minded in order to do that. Many people are afraid to put two ideas together for fear of explosion.[3] And that is exactly what is needed, an explosion of new designs from the old ones full of melodious songs.

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[1]Alexander Girard, American Fabrics, vol. 37-40, (August-November, 1956), p. 35.

[2]Nicholas Berdyave, The Meaning of Creative Art (New York: Harpers Brothers, May, 1956), p. 225.

[3]Paul Smith, Creativity (New York: Hastings House Publishers, 1959), p. 19.

Not much has been done or written on this topic. Extensive research and study is required on the traditional Indo-Pakistani designs in order to explore the possibilities of the contemporary expression of design based on old ideas.

APPENDIX

DESCRIPTION OF PAKISTANI COSTUMES

Shalwar Kameez

Shalwar.--Loose trousers with stitched bands at the ankles worn by both men and women mostly in West Pakistan; they are full at the top and are tight at the ankles. For women the fullness of the bands at the ankles often fluctuates. They are snugly fitted to the ankles according to the present day fashion. Westerners often call them baggy trousers.

Kameez.--Over the shalwar is worn a calf length tunic called kameez or jumper. Women's kameez is well fitted and has two slits at the sides for ease in walking, somewhat like the present day Chinese dress. The hemline of this garmet goes up and down according to the fashion.

Dupatta.--Over the shalwar-kameez Pakistani women wear across the shoulder or over the head a long scarf measuring two to two and a half yards in length called a dupatta. This is either made with the same fabric used for kameez or with some sheer fabric.

The shalwar-kameez is a very popular dress of the teenagers in Pakistan. It is very practical and does not hinder movement. Nurses and air hostesses also wear the

same costume but in the form of a uniform. If the three garments are matched in color then they are called Shalwar-kameez suit.

Gharara

An ankle length divided skirt (basically similar to culottes) worn with a kameez and dupatta is called a gharara. The kameez made for gharara is shorter in length. This is a more formal dress and is worn at weddings and other social and family gatherings. The bridal dress normally is a gharara kameez made in a combination of gold and red colors.

Churidar

Tight fitted trousers worn with kameez and dupatta are called churidar.

Sari

A popular costume of Pakistani women especially in East Pakistan is the sari. It is a light weight, forty to forty-five inches wide and five to six yards long. The material is draped around the body with one end over the shoulder or head. A waist length blouse is worn along with other normal undergarments. The petticoat is ankle length and the sari is tucked into it as it is draped.

Salim Shahi

Pakistani flat heeled, pointed toe shoes worn by both men and women. One of the styles of typical Pakistani shoes

is called Salim Shahi. This style is a closed shoe with pointed toes slightly curled upwards. Normally the heal is flat and may be worn by both men and women, but for fashionable women they are also made with high heels.

Chappals

Pakistani flat heeled sandles or slippers are called chappals.

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