

Towards a Cross Cultural Design by Integrating Batik Motifs into the Persian Carpet Design

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ABSTRACT

This paper investigates the potentials of integrating Batik motifs into the design structure of the Persian carpet. The Persian carpet is an essential part of the spectrum considered as 'oriental carpets', which are hand-woven textiles made not only for the purpose of covering a floor; but also for ornamenting doorways, tables, chairs, and windows. Likewise, Batik has a very special place in the world of 'oriental textiles', which is primarily a cloth decorated by drawing lines in wax to protect parts of the undyed cloth from coloring in the dye bath. With the employment of cross-cultural design methodology, this paper aims to conceptualize a design that integrates batik motifs into the Persian carpet structure. Comparative analyses will be used to examine both traditions, to identify their specific histories and significance in order to produce a meaningful cross-cultural carpet design.

Key words: batik motifs, Persian carpets, hand-woven textiles

ABSTRAK

Kertas ini mengkaji potensi untuk menggabungkan motif Batik terhadap struktur reka bentuk permaidani Parsi. Permaidani Parsi adalah sebahagian dari susur-galur "Permaidani Oriental", iaitu satu tradisi tekstil anyaman tangan yang dihasilkan bukan sahaja untuk melitupi lantai, tetapi juga untuk menghiasi laluan pintu, meja, kerusi dan tingkap. Sementara Batik adalah satu tradisi utama di alam 'Tekstil Oriental'. Tradisi Batik merujuk kepada kain yang dilukis di atasnya garisan-garisan menggunakan lilin untuk melindungi bahagian kain yang tidak diwarnakan semasa proses celupan warna. Dengan menggunakan metode reka bentuk rentas-budaya, kajian ini bertujuan untuk membina satu konsep reka bentuk yang menggabungkan motif-motif batik di dalam struktur reka bentuk permaidani Parsi. Analisis bandingan dibuat untuk mendalami dua tradisi ini, mengenal pasti sejarah dan kepentingan mereka sebagai satu titik-tolak untuk menghasilkan reka bentuk permaidani yang merentas budaya yang bermakna dan bermutu.

Kata kunci: motif batik, permaidani Parsi, tekstil anyaman tangan

INTRODUCTION

Batik is a technique of decorating clothes in the dye bath by drawing lines in wax in order to protect some parts of the cloth from coloring. It is the method of decorating cloth with resist technique. The oldest surviving fabric produced with such a resist technique dates back to the sixth century. In Indonesia, the royalty and peoples of Solo and Yogyakarta in Indonesia are traditionally believed to have worn Batik. Today Batik has proliferated and different regions and communities have a variety of motifs, names and patterns, which distinctly differ in appearance.

The history of Batik and how long this method of decorating cloth has been practiced is difficult to establish with accuracy. Fragments of fabric decorated with resist technique have been found in tombs in China dating back to the 6th century, and by the 8th century the wax resist technique seems to have spread across East Asia to Japan. However it

is by its Indonesian name of "Batik" that the process is best known. Most scholars concur that it is in Indonesia that the skill of Batik making reached the highest level of artistry (Kerlogue 2004: 12). There are references to drawing on cloth in Javanese texts dating back to the 12th century. If indeed these are the earliest references to Batik a moot point (Kerlogue 2004: 18).

Ethnically and linguistically diverse, Indonesia has a majority Muslim population, with a growing movement that discourages the realistic portrayal of animal and human forms in artistic activity. To get around such a dilemma, the batik worker does not attempt to express subject matter such as flora and fauna in a naturalistic way. Rather, the artist takes one or more of the key elements in a plant or an animal (such as a bud, a leaf, a seed, a feather, or a tail) and through elaborate embellishment, constructs it into a distinct design element. At first, the source of these motifs was fairly recognizable.

With the evolution of the motif in the hands of new generations of batik artists, the original inspiration for the design is no longer always evident. In many cases, the name of the design element continues to provide a clue (Fraser 1986).

Similarly, the design elements in Persian rug also fall within the Islamic non-figurative tradition, dominated by stylization and abstract geometrical patterns. Kilims (Figure 1) and pile rugs (Figure 2) are two basic types of rugs. Kilims are flat-woven rugs in a simple manner by looping weft (horizontal) threads around stationary warp (vertical) threads in order to create pattern. Pile rugs are made by knotting threads through the cross-hatched of weft and warp threads

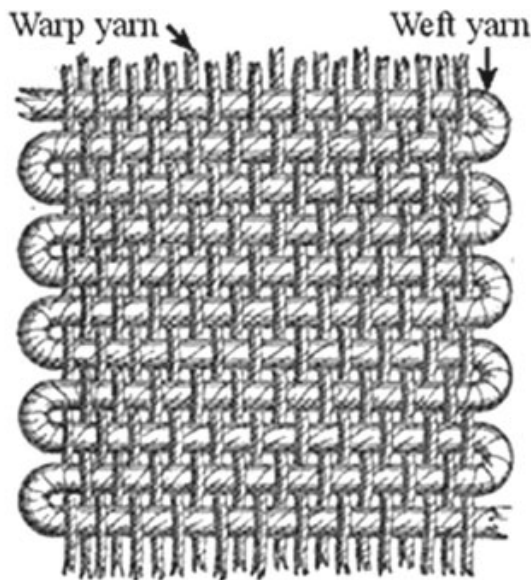


Figure 1. Kilim structure

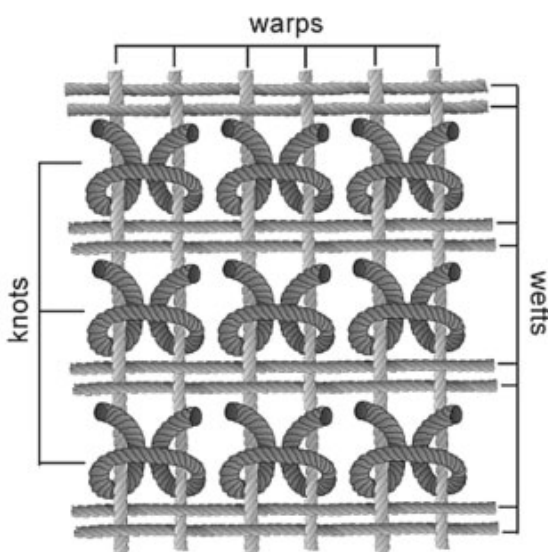


Figure 2. The structure of a carpet (pile rug)

While Persian carpets enjoy popularity in Southeast Asia, its design has not been fully conditioned for the region's audience and consumers. Persian carpet designers need to consider a cross-cultural design approach to re-invent their modes of working in order to find newer relevance in a highly globalized world.

Developing notes towards such a methodology, this paper seeks to integrate Persian carpet design with local and traditional motifs, which is popularly known in Southeast Asia as 'Batik' and is consumed as a part of people's daily life across Indonesia and Malaysia. Persian carpet design has the capacity to be flexible enough to be mixed with different motifs, especially floral ones, because of how the garden was (and continues to be) treated as a crucial element in Persian weaving motifs, taking on the form of compartment carpets and other designs.

This paper focuses on integrating batik motifs into the design structure of the Persian carpet. To do that the following methodology has been used:

- 1- **Archival:** researching of different types of Indonesian batik motifs and carpet structure.
- 2- **Studio Experiment:** to establish a cross-cultural rug design employing the design elements from Batik and Oriental rug tradition. A series of studio experimentation is conducted using BOORIA (professional textile and carpet designing programme) and Photoshop software to produce design prototypes.

The first methodology helps to study Indonesian batik motifs, the structure of the Persian carpet and the relationship between them. The studio experiment methodology helps to apply the analysis in establishing a cross-cultural for the Oriental rug.

This paper discusses the three main classifications of Batik motifs, namely *Isen* or background designs, geometric designs and *semen* or non-geometric designs. It also elaborates on the seven categories of the Iranian carpet structure and the potentials of merging these two traditional arts, from two different cultural regions of the world. As such the cross-cultural carpet design will draw on the Persian carpet, and the *semen* motifs of flowers, leaves and birds chosen from Indonesian Batik motifs specifically from the northern coast of Java. The distinguishing characteristic of *semen* designs is that they are irregular, all-over patterns of tendrils, leaf and flower motifs which visually aligns them closer to the floral motifs of Persian carpets.

HISTORY

The history of Persian carpet goes back to the Bronze Age, flourishing along with pottery-making, which is the signature of early human civilisation. However, the historical knowledge about rug is not as extensive as pottery. Given that wool is destructible in humidity and soil, a large segment of carpet treasures has eluded archaeological discoveries except for a few. The “Pazirik” (Figure 3) rug is one of the rare discoveries, unearthed from the Siberian ice and dates back to 5th century B.C. There is a big historical gap (about 1700 years), between the Pazirik rug and two other rugs, Marbi and Phoenix (14th -15th century). The whole history of Persian carpet can be divided into three periods and each period has its own characteristic and consequences:

1. Pre-Safavid dynasty (before 1520)
2. Safavid dynasty (1502-1736)
3. Modern time (mid 19th century onwards)



Figure 3. Pazirik carpet 500 B. C.

Two Major Stylistic Variations of Persian Carpet Design

Scholars like Herbert (1982) divide the Persian carpet design into three categories: rectilinear (sometimes called geometric) designs, curvilinear and floral designs, and pictorial designs. Contemporarily, the design can be categorized into two distinctive types or styles:

1. Designs with straight lines (geometric design) (Figure 4).

2. Designs with curved lines (curvilinear design) (Figure 5).



Figure 4. Tribal rug with geometric design

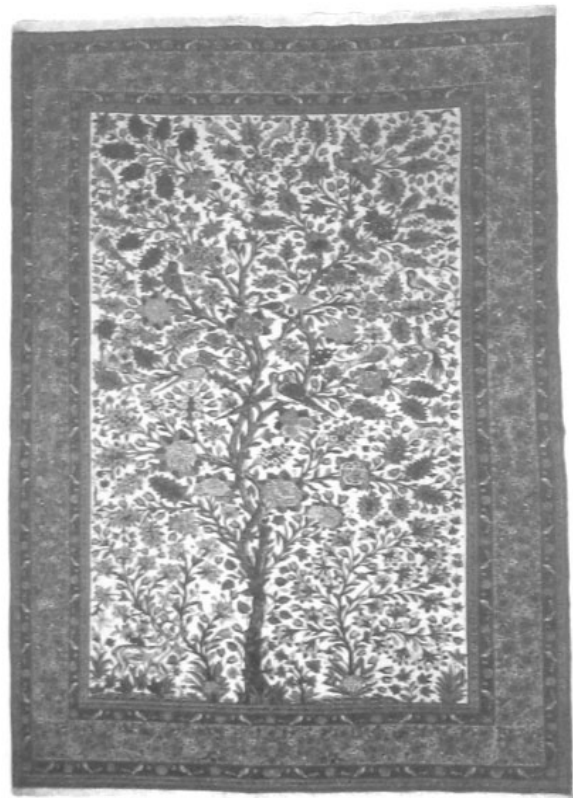


Figure 5. Urban rug with curvilinear design

These two styles coincide with another two different types of Persian carpets, namely rural and tribal carpets. The former is, usually geometric, while the latter is characterized by curvilinear motifs. The urban carpet is dominated by curved lines; the sizes vary markedly from small to very big size, with more complicated design. For carpets that contain simple and more geometric designs, the sizes are usually small and with low density. The density of a pile rug is often expressed in the number of knots per square inch. For the Persian carpet, it is based on the number of knots per 6.5 cm or 7 cm respectively. Undoubtedly, the design would be clearer with more knots per square inch.

“The field composition can be classified into prayer (Figure 6), medallion (Figure 7), repeat motif, all over pattern (Figure 8), open field (Figure 9), panel and portrait or pictorial carpets. Within these main categories, the different styles and variations are practically infinite (Thomas 1996: 39). Prayer rugs are usually designed for praying. The structure of the design is *mihrab* (prayer niche) or an arch. Medallion design rugs have one or more medallions dominating the field. Sometimes a quarter of the medallion (or spandrel) is repeated in the corner of the field and it can be open or layered with patterns. In the case of the all over pattern rug, the field is filled with non-repetitive motifs.

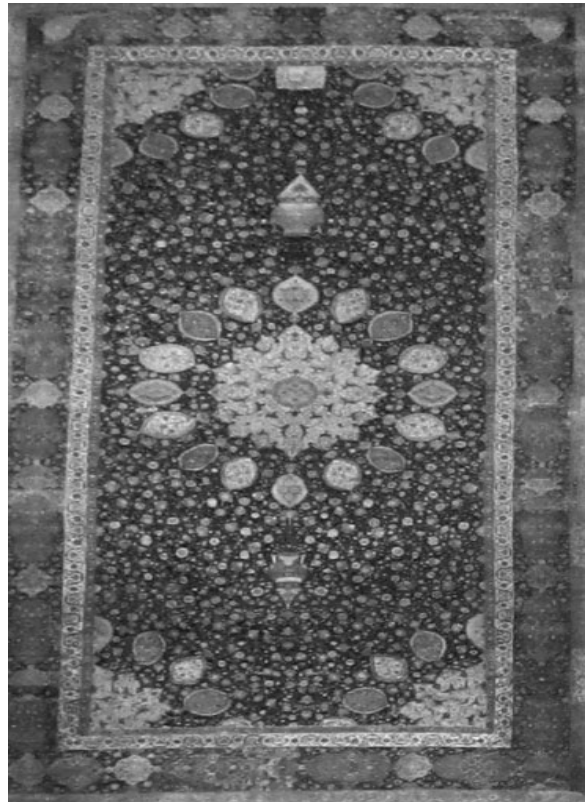


Figure 7. Medallion carpet



Figure 6. Prayer rug design



Figure 8. All over design



Figure 9. Open field design

BATIK DESIGNS

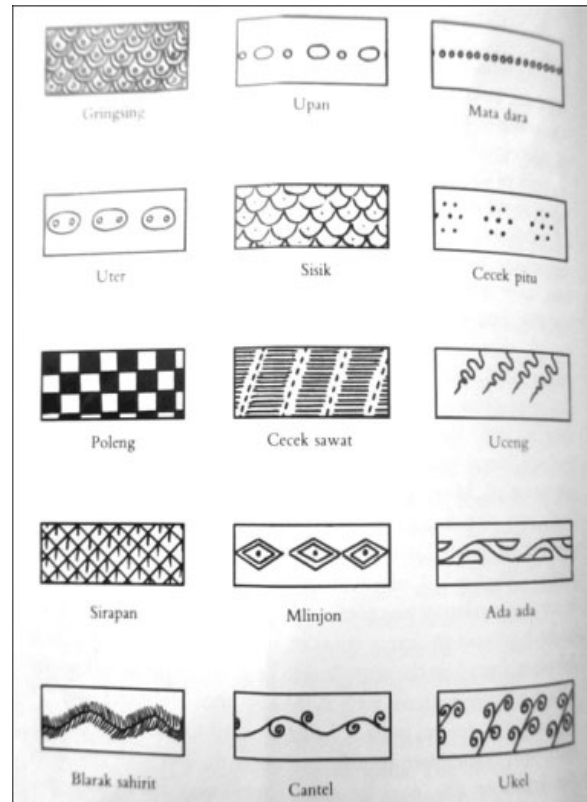
Batik designs are visually very pleasing. They reveal a taste for rhythm and complexity in both geometric and freehand designs. The best in batik design shows a distinct harmony between the broad patches of color and the line of the principal design and the subtle detailed filling of the background pattern.

The classification of Indonesian Batik motifs by Fraser (1986) include:

Isen or Background Designs

Isen patterns (Figure 10) consist of simple repetitive design elements based on dots, lines, squares, crosses, foliage, and flowers. On some of the plainer batik, an *isen* motif might be the sole design element.

Designs based on straight, undulating, parallel, and diagonal lines include those with names such as the chequer-board (*poleng*), petal veins (*cecek sawat*), river fish (*uceng*), and roof-tile (*sirapan*). More flowing designs are based on lozenge shapes (*mlinjon*), rice stalks (*ada ada*), coconut fronds (*blarak sahirit*), tendrils of plants (*cantel*), and hooks (*ukel*). Chequer-board squares with dots in the centre, cruciform motifs, and other designs with

Figure 10. *Isen*

intersecting lines are also popular filler patterns, as are zigzags and lozenges aligned in a variety of ways.

Stylized representations of well-known flora of Indonesia such as rice stalks, coconut fronds, curling leaves, buds, tendrils, and simple floral motifs are also represented in *isen* patterns.

Geometric Designs

Ceplokan or repetitive designs

Ceplokan designs (Figure 11) consist of symmetrical motifs in the form of stars, crosses, rosettes, lozenges, or polygons as seen from above. Some maybe extremely simple consisting of a single motif or pair of motifs (such as the *grompol* or *truntum*) spaced at regular intervals over the surface of the cloth. Conversely, others may be models of complexity in which a number of design elements coalesce into different patterns.

Indonesia's well-known flowers and fruit such as hibiscus, jasmine, lotus, cotton plant, banana, mangosteen, and the *salak* fruit have all been portrayed in stylized form on batik. Various spices such as cloves, nutmeg, betel nut, and the coconut palm have all been named in batik design. Members

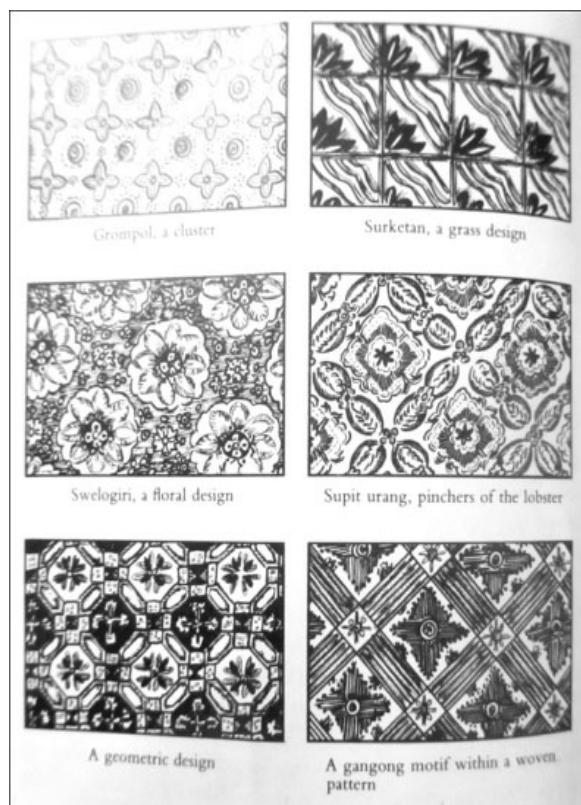


Figure 11. Ceplokan

of the animal world are also seen in conventionalized designs. Butterflies are a popular motif, as are water creatures such as *bibi* mussels, fish, prawns, and the claws of the crab. Natural phenomena such as moonbeams, stars, and swirling water may also be expressed in *ceplokan* motifs. Abstract concepts in the realm of beliefs and feelings have also lent their names to batik designs. For example, it is not unusual to come across batik designs called ‘joy of meeting’, ‘pining for a loved one’, ‘defender of the faith’ and so on.

Kawung or circular designs

One of the oldest and most famous of the *ceplokan* designs is the *kawung* (Figure 12) which consists of parallel rows of ellipses. These ellipses may be embellished inside with two or more small crosses or other ornaments such as interesting lines or dots. It has been suggested that the ovals might represent flora such as the fruit of the *kapok* tree or the *aren* (sugar palm).

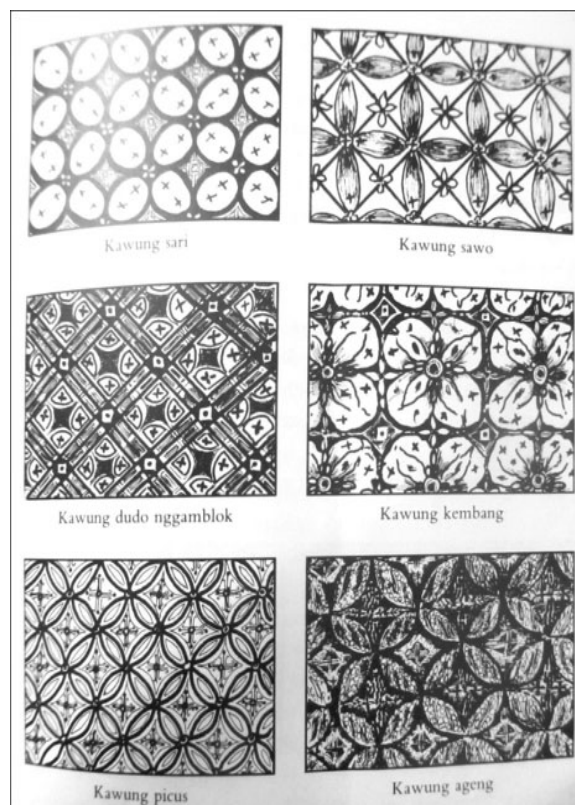


Figure 12. Kawung

Jelamprang or designs based on Indian textiles

Closely related to the *kawung* is the *jelamprang* design, a repetitive, eight-rayed rosette motif set in squares, circles or lozenges, the boundaries of which touch but do not overlap. This design is said to symbolize Allah’s nine *walis*, or defenders of the faith. The design also draws its inspiration from the *patola* motif and may be seen on Indonesian *ikat* work.

Nitik or weaving designs

Many of the *jelamprang* designs are composed of small dots and lines imitative of weaving designs called *nitik* (Figure 13). The composition of stars, squares, crosses, and circles are similar to the *ceplokan* designs, but are usually portrayed on a plain dark black ground. Some of the simplest *nitik* designs such as *nam tikar* (‘woven bamboo’) imitate mat and basket weave patterns and among the oldest batik designs. One of the most important of the *nitik* patterns is *tirta teja* (‘bright water’), a pleasing design in the form of horizontal zigzags. Others have names such as *jayakusuma* (‘flower of victory’) or *onengan* (‘to pine for a loved one’).

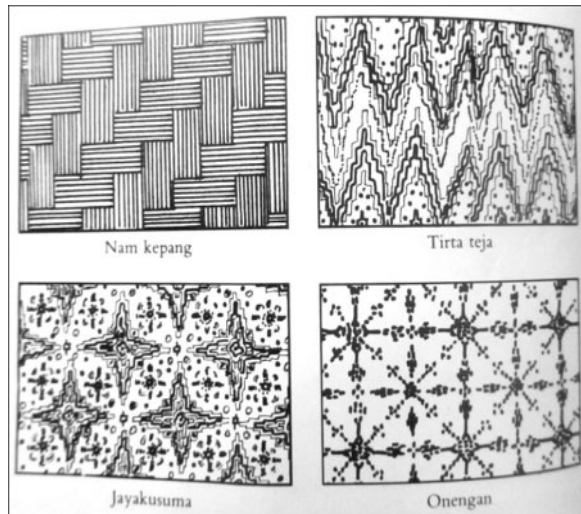


Figure 13. Nitik

***Garis miring* or parallel diagonal designs**

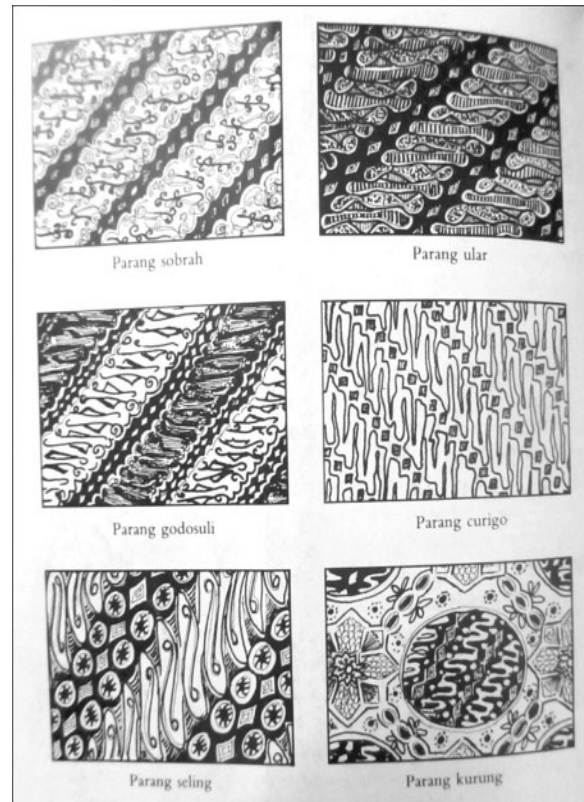
Diagonally aligned designs in Javanese batik are referred to as *garis miring*. They are among the most visually striking of all batik patterns. They have a pronounced slimming effect on the wearer and are considered to be fortunate patterns.

***Parang* or knife design**

The most famous of the *garis miring* (diagonal designs) is the *parang* (Figure 14) which has several related meanings such as ‘rugged rock’, ‘knife pattern’, or ‘broken blade’. It consists of a series of board light-colored bands bounded by undulating or scalloped edges. The *parang* usually alternates with narrower bands in a darker contrasting color. These darker bands contain another design element in the form of a line of lozenge-shaped motifs called *mlijnjon*.

Over forty *parang* designs are known. The most famous is the *parang rusak* which in its most classical form, consists of rows of softly folded, slightly bloated undulating ribbons of creamish white aligned between parallel rows of large dots of the same color. The largest of the *parang rusak* designs is called *barang*. A much smaller example is referred to as *parang klitik*.

The variations in size, shape, and interior design of the motif give rise to different names for *parang* design. A number of *parang* patterns feature curling tendrils and hooks, and have names such as *parang sobrah*, or ‘hanging hair design’.

Figure 14. *Garis miring*: parang

***Udan liris* or ‘light rain’ design**

One important group of diagonal running designs is called *udan liris*, or ‘light rain’. It consists of row upon row of narrow bands featuring linear examples of most of the well-known classical Batik designs. Rendered in brown on a white ground, *udan liris* is virtually a mini-register of well-known Indonesian textile motifs. As with other traditional patterns, *udan liris* can be used to form a background for other motifs.

***Tambal miring* or patchwork design**

The *tambal miring* design consists of a montage of Central Javanese batik designs set within triangles, circles, or onion-shaped lozenges arranged in horizontal or slanting rows. The varying alignment of the component design elements, coupled with the contrasts between density of pattern and color, gives the appearance of patchwork. This design is thought to imitate the patchwork garments formerly worn by Javanese priests as protection against malevolent influences.

Tumpal or triangular design

The *tumpal* border design which consists of a row of triangles with at least two equal sides and two equal angles is a very ancient and popular art motif in Indonesia.

The *tumpal* pattern usually appears at one end of a piece of cloth in the case of a sarong and at both ends on a *selendang*. The triangle is usually filled with floral or fauna motifs. The zigzag *tumpal* may be subdivided into three or four small triangles with slightly differing elements of design and contrasting colors in each sector. A small border usually delineates the boundaries of the *tumpal*. The area between the opposing lines of *tumpal* is in a darker color. It may be plain or may contain small scattered geometric or floral motifs.

Semen or Non-geometric Designs

It is the *semen* designs that present some of the most imaginative and intricately ornamented designs. The word *semi* refers to ‘small buds and young leaves’ that are more often depicted as curling tendrils providing an interlocking background for stylized flora, fauna and symbolic scenes. The motifs show a wide range of Hindu, Buddhist, and Javanese inspired designs and may include elements from both European and Chinese sources.

Flower, fruit and leaf motifs

Some *semen* designs (Figure 15) consist entirely of flower and leaf motifs. Designs focusing on creepers and vines are often referred to as *lung-lungan*. Creepers of taro, ivy and fern are all represented in *semen* designs. Like *ceplokan* and *parang*, some *semen* designs are prefixed with the word *kembang* to indicate floral motifs.

Creepers may also be associated with fruit and vegetables such as chili pepper, mango, and grapes. One important traditional design is *pisang Bali*, a complicated motif showing stylized banana leaves and flowers. Palm leaves are represented by *sembagen*, a stylized fruit and flower design. Modern *semen* patterns feature flowers like the hibiscus.

Bird motifs

Some of the most interesting of the *semen* patterns consist of floral designs combined with animal and bird motifs from both the real and imaginary worlds.

In Indonesian art, bird motifs have always played an important role in both symbol and ornament. Among the numerous birds of Indonesia, pride of

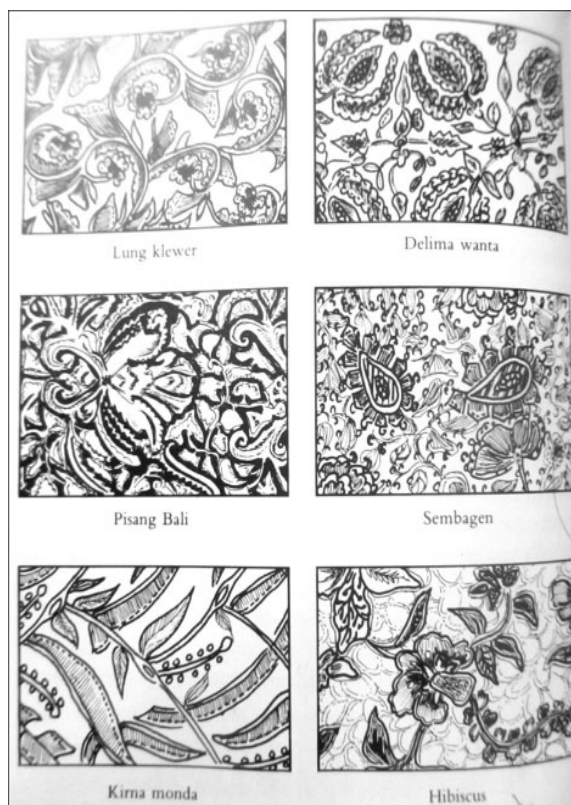


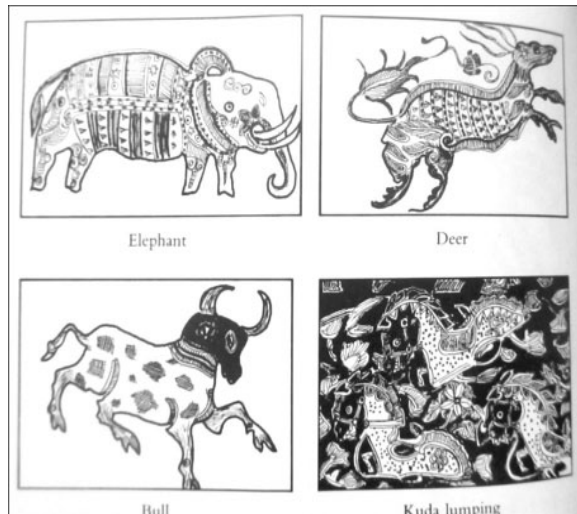
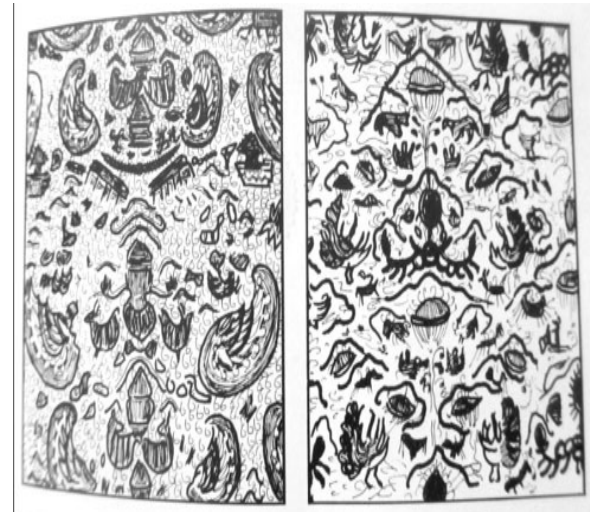
Figure 15. *Semen*: Plant motifs

place is occupied by the *garuda*. In batik the *garuda* may appear as an entire bird or, more commonly, in its feathered parts.

Rivaling the *garuda* in popularity on Batik is the phoenix, a motif imported from China where it has traditionally been regarded as an emblem of beauty. The peacock, popular both in Indian and Chinese mythology, also appears in Indonesian art. It is very similar to the phoenix when depicted on batik. The rooster or chicken appears on batik in the *ayam puger*, or ‘clucking hen’ design. Other birds which appear on batik are the nightingale, the pigeon, the parrot, the crow, the pea fowl, and the owl.

Animal motifs

Animals (Figure 16) may also be featured in *semen* designs. In early Indonesian art, the elephant, the buffalo, and the *kuda lumping* or dancing horses all appeared as mounts for the deceased. They occasionally appear in *semen* designs, as do tigers, monkeys, and deer. Although not indigenous to the archipelago, the lion is a very prevalent motif in Indonesian art. It can be the Indian lion by showing only the face, the Chinese lion with a curling mane and flowering tail or the Dutch crowned lion. The dragon, snake or *naga* also are a very prevalent

Figure 16. *Semen*: Animal motifsFigure 17. *Semen*: Mountain and landscape motifs

motif in Indonesian art. On batik, *naga* are sometimes depicted in pairs and may be either facing or looking away from each other.

Other reptiles appearing in *semen* designs include the tortoise and the lizard. Fish may be seen in *semen* designs or as a repetitive element in a *ceplokan* design. *Crustacea* such as shrimps and lobsters, sea horses, jellyfish, and other marine and aquatic creatures called *bibis* or *bekingking* also appear in batik design, as does the insect world. Caterpillars, scorpions, centipedes, and beetles appear surreptitiously in *semen* designs. Butterflies and bees are popular motifs in northern Javanese batik and are usually portrayed naturalistically.

Rock and cloud designs

Natural phenomena such as rocks and clouds are rendered in a most fanciful and imaginative way. Rock designs such as *wadas grompol* and *pagar wei* and the *megamendung* cloud designs show a distinct Chinese influence. Rocks may be identified by holes and small plants sprouting from them. On the cloud motif lozenge-shaped spirals are thicker and are usually aligned diagonally across the cloth. The depiction of rocks and clouds in Javanese mythology symbolizes union of the earth and sky suggestive of procreative powers.

Mountain and landscape design

Mountains (Figure 17) in batik are usually portrayed as a series of loosely connected, undulating scallops. They are often rendered in white against a darker ground and culminate in a summit which (possibly) represents Mount *Meru*, the centre of the Buddhist

universe. Series of mountains in *semen* patterns subdivide the cloth into repetitive design areas depicting scenes of great symbolic and visual complexity. In some symbolic mountain scenes, there is a central stylized plant form complete with roots, a central stem, and branches which terminate in blossoms, buds and leaves.

Another very popular *semen* design done in the same vein is the *alas-alasan*, or 'forest' design. Within a network of tendrils backed by mountains appear a multitude of animals from both the natural and mythical worlds.

Ship motifs

Ship motifs, rich in symbolism, have been very important in Sumatran textiles. In batik the most popular ship motif is the *kapal kandas*, or 'beached ship' design. In this design, a pair of facing birds appears on what looks like an island or undulating vertical lines. On *Indrumayu* batik the stranded ship is quite abstract and is surrounded by what could be rocks, sand, or floating marine vegetation. Realistic portrayals of sailing ships, paddle ships and cruisers have all appeared on batik from *Pekalongan*.

Human figures

Despite a general prohibition against the depiction of human figures, Javanese shadow puppet figures or *wayang kulit* showing characters from Indian epics such as the *Ramayana* and *Mahabharata* and from East Javanese legends may be seen on batik. With the increasing tourist trade, they are becoming more popular than ever.

Scenes of Indonesian village life are occasionally seen on batik. People at work in the fields bordered by houses on stilts, children at play, officials on horseback, humble coolies, and sword-bearing soldiers have all been portrayed on batik. Even featuring war with tanks, parachuting air men, and heavily armed frigates, fantasy stories such as 'Little Red Riding Hood' as well as angels and cherubs all have been depicted on batik.

Proscribed Batik Designs

Indonesian batik scholars such as Iwan Tirta and K.R.T. Hardjonogoro have suggested that there were two parallel traditions in Batik, i.e. that of the palace and that of the *rakyat*, or common people (Fraser 1986: 3).

Such a distinction appears to have even been formulated into formal decrees in 1769, 1784 and 1790 when the Sultan's 'families and high officials ordinances' were passed in the courts of Yogyakarta and Surakarta listing Batik patterns which could be worn only by members who maintained certain social status or relationship to the Sultan. The *rakyat* was expressly forbidden to adorn such designs. The designs that were reserved by the palace were: *parang rusak*, *sawat garuda* wings, *udan liris*, and the *cemukiran* leaf pattern bordering the plain centre field of a head or breast cloth.

The classification of Batik by the royalty had been converted into a science, when the Sultan of Yogyakarta had certain patterns reserved for particular groups of people. For instance, *parang rusak* design, the *sembageng* pattern and large *garuda* motifs were only to be exclusively adorned by the ruler, the Crown Prince, and their respective consorts. For the countries and the larger extended kinsmen bearing the title of *pangeran*, the Sultan reserved the *semen* patterns with *garuda* wings. Distant relatives who had been bestowed the title of *raden* were allowed to wear all *semen* designs without the wing motif along with the *kawung* patterns and the *rujak senti* patterns.

THE DESIGN OF PERSIAN CARPET

Despite the influx of foreign aesthetics, many Persian weavers and designers still follow the traditional designs used by their ancestors hundreds of years ago.

The peculiarity of carpets produced in modern Iran is their floral patterns. Majority of the carpets

have distinctly composed leaves, flowers palmettes, rosettes, and other graceful and intricate patterns. This is not to suggest that all Persian carpets have floral designs. For instance, the carpets from the northern regions of *Heriz*, *Geravan*, *Sarab* and *Gharajeh* and southern regions of *Bakhtiari*, *Afshar* and *Shiraz* are more geometric than floral.

The Persian love for garden is often depicted in the form of compartment carpets and other designs believed to represent their garden. Animals and human forms were also used in the old (more than 50 years old) Persian carpets.

THE CUSTOMS AND PRINCIPLES OF PERSIAN RUG DESIGN

In order to consider employing Batik motifs into Persian rug, it will be important to understand of the basic principles of rug design. Such familiarity and understanding ensures a unified design in which the elements from different traditions embrace each other harmoniously.

A fundamental element in Persian rug design is the border. Rug designers in Iran believe that having no border will de-emphasize the field of the rug away from the field of vision. Furthermore, the border at both sides must consist of the main border in the middle and one, two or three smaller borders. The design for the border is usually repeated.

The field of the rug which is enclosed and framed by the border is subjected to specific design principles. The first and main rule is symmetrical balance. The left and right half of the rug is usually the same except all over design (in which also you can see that balance is still abided). In most of the rugs the top and bottom half also are same. These symmetries make viewers appreciate the rug design from both sides.

There are different types of Persian rug field which will be investigated and classified in this research. One of the most important and common one of these is the Medallion, which, like the rest of Persian rug design, observes very specific principles that establish appropriate proportional relationship within the design. These three principles are:

1. The length of the medallion (the oval part not the two heads) is equal to $\frac{1}{3}$ length of the whole rug.
2. Width of the border is equal to $\frac{1}{6}$ width of the rug.
3. Total width of all the small borders is equal to width of the main border.

THE CROSS-CULTURAL DESIGN EXPERIMENT

When doing cross-cultural design, one of the important needs is to communicate beyond the geographical, cultural and political boundaries. The matter is the exotic elements must be transformed in order to make a distinct style.

Steiner (1995) outlines three basic procedures in cross-cultural design:

1. Quotation (reproduction): This is by applying icons without knowing them.
2. Mimicry (re-creation): It is working in the style of a special artist or school. Here one tries to understand to some extent the model was used.
3. Transformation: When foreign elements are naturalized and personalized..

As mentioned earlier, the methodology used for this paper, is archival and studio experiment. One of the designs which have been done for this study by the author of this paper is chosen as an example. The design is done through the transformation of floral motifs of Indonesian batik into the Persian rug. In so doing, 3 dominant factors need to be considered:

1. Density of Design:

The finely woven Persian floral rugs are designed and carefully drawn on graph papers (each pixel of that is equal to a knot), which are in a close relationship with the density of the rug. The density for this particular design is 70 knots per 7cm using the materials of silk or fine wool for the knots.

2. Motifs:

Every motif or shape has a very clear edge. In the other word, every two colors must be separated from each other by a third color (except the gradient colors or in some particular spaces).

3. Space:

Empty space is avoided in carpet design (except open-field style). The reason is that as the carpet is representing the garden or paradise, leaving the space empty will open a space to be placed by the devil.

Considering the factors discussed above, the experimental method designed for the current project may be described as follows: As the first image depicts (Figure 18), the original design is floral *semen* Batik from *Pekalongan* that uses the technique of printing or resist dying. One also notices that the motif is extremely detailed and high in density, resulting in the

need to resize the new design into limited pixels (Figure 19) because of the density requirements of the target carpet. The resized design, however, is more restrained in comparison to the original. Thereafter, we start drawing the same flowers and motifs one by one from the original batik design into carpet design (Figure 20). Once the transfer is complete (Figure 21), we arrange the motifs according to a particular Persian carpet structure (Figure 22), which in this particular case is the allover design.

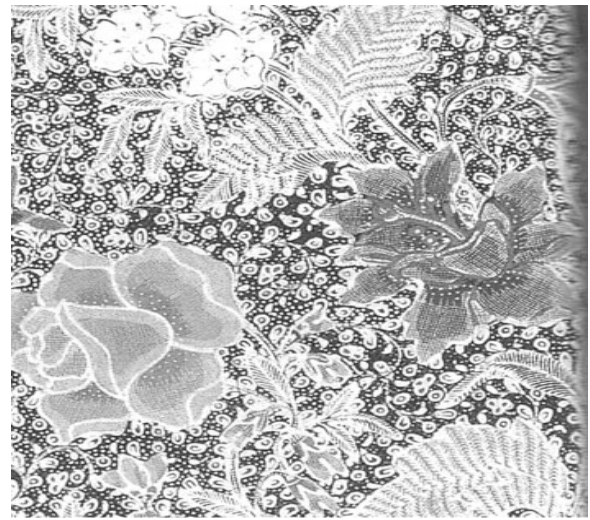


Figure 18

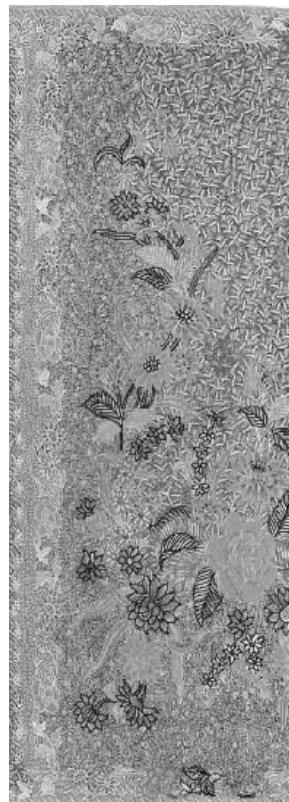


Figure 19



Figure 20



Figure 21

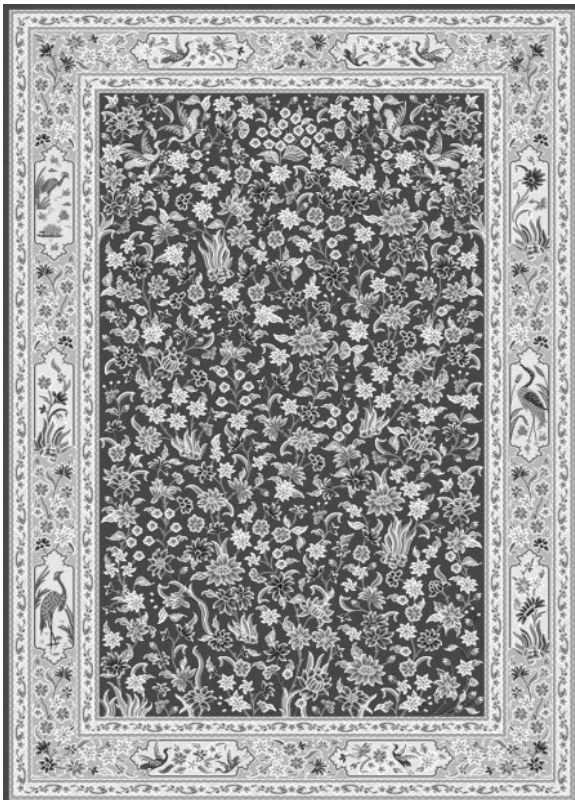


Figure 22

The solution of transforming the motifs which has been the main challenge of the current project was to transfer the motifs onto pixel based software like *Booria* or Photo shop. This would allow one to simplify the motifs into the limited pixels for each new design.

CONCLUSION

Designers are among the major influence changes in the world. They are responsible for providing sufficient change to stimulate life without overloading the human systems and capacities. In other words, designers have the potential to be active change agents. When presented with a problem and its context, they would attempt to alter the very basis of either one or both depending on the requirements of a particular client or society at large. As such, this study emphasizes the agency of designers and designs to create new meanings and consequently offers ways for society to engage with their daily life meaningfully.

The importance of cross-cultural investigation can help the arts, especially traditional arts to continue to be relevant in contemporary life. This paper expounds on the versatility of traditional arts as the strength that enables them to be re-configured through a meaningful exchange and merging with others. In turn, a new hybridized tradition will transpire to suggest a new territory for Persian carpet in south-east Asia and introduce a new artistic and entrepreneurial opportunity for this region.

ACKNOWLEDGEMENT

The research for this paper is made possible through the fellowship of the Universiti Sains Malaysia (USM). I would like to take this opportunity to thank the Institute of Postgraduate Studies (IPS) who enabled me to complete this project.

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