

## **Cultural Diffusion, Adoption and Adaptation - Motifs and Patterns in Indonesian Textiles -**

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(Received April 20, 2009 : Accepted April 30, 2009)

### **Abstract**

*The objectives of the research are to explain the nature of cultural diffusion and its associated theoretical concepts, to review the nature of traditional Indonesian textiles and to focus particular attention on the origin, evolution and diffusion of motifs and patterns associated with the decoration of two important categories of Indonesian textiles: batiks and ikats. Cultural diffusion refers to the process by which cultural traits, material objects, ideas, inventions, innovations or patterns of behaviour are spread from one social or geographical context to another. Examining the decoration on traditional textiles produced across the Indonesian archipelago, certain motifs and patterns are shown to have been retained from ancient times, and others have been adopted from elsewhere. There is great cultural diversity across the archipelago and ample evidence of cultural diffusion.*

*Key words : diffusion, batik, ikat.*

### **I . Introduction**

The objectives of this presentation are first to explain briefly the nature of cultural diffusion and its associated theoretical concepts, second to review the nature of traditional Indonesian textiles and third to focus particular attention on the origin, evolution and diffusion of motifs and patterns associated with the decoration of two important categories of Indonesian textiles: batiks and ikats.

### **II . Cultural Diffusion - Its Nature, Processes and Mechanisms**

The term cultural diffusion refers to the process by which cultural traits, material objects, ideas, inventions, innovations or patterns of behaviour are spread from one social or geographical con-

text to another. Such a process is a key aspect of globalisation, a term coined in modern times to refer to the increased inter-connectivity between countries, generally expressed through trade and facilitated through developments in technology and communication. Probably the best modern example of world-wide diffusion is fast food (e.g. McDonalds).

The study of cultural diffusion is concerned with the spread of culture and the factors that account for that spread, including migration, communications, trade and commerce. Generally cultural traits originate in a particular area and, from there, spread outward. After diffusion the trait will not appear identical in its new location. A cultural trait will not keep spreading. Rather it will encounter barriers which limit the spread. Barrier effects may be physical or social. Physical barriers include the natural environment (seas, mountains,

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deserts, forests and extremes of climate). Social barriers are those characteristics that differentiate groups and potentially limit interaction, including language, religion, race and ethnicity. In recent years, barrier effects have been overwhelmed by modern means of communication. Adoption of the new is often accompanied by disuse of the old; hence the apparent decline of cultural diversity.

So the term "cultural diffusion" is used to describe the transfer or spread of cultural phenomena such as ideas, technology, music, artistic styles, languages, religions etc, between individuals or groups of individuals within a single culture (intra-cultural diffusion) or from one culture to another (inter-cultural diffusion). Examples of inter-cultural diffusion include practices associated with agriculture, techniques relating to iron smelting, the use of zero in a counting system and, in modern times, the automobile, the western business suit and various varieties of "fast" or "ethnic" food. An idea, technique or innovation may remain strong and develop further (going from strength to strength) in its source area while spreading beyond its geographical boundaries to other areas. Diffusion may also relocate an idea, thus allowing it to leave the area of its source and migrate elsewhere. Diffusion of an idea or innovation may also be contagious; that is, based on contact from person to person within a particular population. Stimulus diffusion is when an innovation or idea from one source stimulates a further more appropriate idea elsewhere; so while the initial idea may be rejected in one form, a further, more appropriate idea may develop and be accepted.

Historically, migrating populations have often brought with them new ideas and innovations. Trans-cultural diffusion agents may include traders, adventurers, explorers, slaves, diplomats, soldiers and hired artisans, craftspeople and labourers. In literate societies, innovations and ideas can be communicated through letters and books and diffusion thus encouraged. In the modern era, various forms of mass media have filled the same function.

Various diffusion models have been proposed over the years. Two schools or perspectives emerg-

ed during the late nineteenth and early twentieth centuries. At the two extremes were those observers who believed that there were a limited number of locations (possibly only one) from which important innovations could be sourced and spread worldwide, and others who argued that all human beings possessed the necessary psychological capabilities to allow them to innovate. This latter view was associated with the belief that many important innovations arose independently in different locations and that diffusion had no impact on cultural development. The debate developed further during the twentieth century to take a more balanced stance. Among the leading theoretical contributors to the development of diffusion theory and its associated concepts and perspectives were: Franz Boas (1858-1942) a pioneering anthropological field worker and theorist; Leo Frobenius (1873-1938), the originator of the concept of cultural circles; Fitz Graebner (1877-1934), a leading diffusion theorist; A. C. Haddon (1855-1940), a Cambridge zoologist and anthropologist, who produced an important book entitled "A Short History of Anthropology"; Thor Heyerdahl, a twentieth century Norwegian adventurer; A. L. Kroeber (1876-1960) a student of Franz Boas; Friedrich Ratzel (1844-1904) who contributed significantly to nineteenth century theories of migration and diffusion; W. H. R. Rivers (1864-1922) was a strong supporter of diffusion perspectives and spoke strongly against evolutionist perspectives. Diffusion theory therefore had its origins in the discipline of anthropology. In more recent times relevant concepts have been used in the areas of archaeology, cultural geography, business studies and marketing. The work of Rogers (2003) is of particular importance in introducing diffusion concepts to researchers from a wide range of disciplines.

Traditional textiles offer a particularly rich source from which to consider cultural change and diffusion. The textiles of the Indonesian archipelago are renowned for their diversity and variety, from region to region and from island to island. For this reason attention is focused below on reviewing the possible origins and evolution of mo-

tifs and patterns used on traditional textiles from across the archipelago, focusing in particular on identifying regional variations and characteristics specific to a particular region or area. The term "cultural domains" may be used to refer to each of these specific areas. Attention is focused initially on providing a brief historical background and also on identifying agents of diffusion.

### III. Historical Background and Agents of Diffusion

For much of the second millennium CE, the Indonesian archipelago was a port of call to countless foreign traders, adventurers, colonists and missionaries. Before the arrival of the Portuguese, the Dutch and the British, all in search of rare spices and other precious commodities, Chinese, Indian and Arab traders had already left their cultural mark on parts of the archipelago. Buddhism and Hinduism appear to have co-existed in Java (the most populous island) for many centuries until Hinduism become dominant in the thirteenth century CE (Hann, 1993). Islam became accepted widely by the sixteenth century, having spread gradually from various trading ports in Sunatra, Java and other islands where it had been introduced by Arab, and possibly also Indian traders, some centuries previously. Subsequently, European colonists brought Christianity, which found particular acceptance in the islands to the eastern part of the archipelago. Various cultural changes came in the wake of these successive waves of outside influence. In the decorative arts, especially textiles, a rich catalogue of motifs, symbols and patterns developed, retained from ancient indigenous animistic beliefs, and adopted from Buddhism, Hinduism and Islam, as well as various European, Indian, Chinese and other Asian sources. So it can be seen that the principal agents of diffusion across much of the archipelago were trade, the spread of religion and colonialism. The term "cultural domains" may be used to refer to regions, areas, islands or island groups exposed to these outside influences. In each case a unique iconography developed, often involving adapting

the new to fit or blend with the old. Significant differences thus developed across the archipelago, and certain categories of motifs, patterns and other stylistic features, can be associated with particular sources as well as particular regional destinations (or cultural domains). This paper is concerned with the results of the process by which various cultural domains retained the old and, at the same time, adopted and adapted the new, as expressed in the motifs and patterns used in the decorative arts.

### IV. Categories of Textiles

As noted previously, Indonesia offers a particularly rich variety of types and categories of traditional textiles. Probably the best known of these are batiks and ikats. Regional variations in the motifs, patterns and symbols associated with each category are identified below. A brief explanation of each technique is given also.

#### 1. Batiks

Batiks form an important class of decorative art in Java (Indonesian's most populous island). The word batik is used to refer to wax- (or sometimes paste-) resist-patterning techniques and the resultant textile products. The derivation is apparently from the Javanese *ambitik* meaning to mark with small dots (Steinmann, 1947). The process, as it is practised in many parts of the world, involves the application of hot molten wax to selected areas on the fabric's surface. On solidification of the wax, the fabric is immersed in a dye bath. The wax (or resist) acts as a barrier to the dye and take-up only occurs in the un-waxed areas of the fabric. In the production of monochromatic batiks, the resist is applied once only prior to one dye-bath treatment. With polychromatic batiks, more than one dyeing takes place together with an equivalent number of resist applications. Subsequent to dyeing, the resist is removed. There is a long-standing debate on the origin of batik, and whether or not it is indigenous to Indonesia; this is outside the scope of this paper, but interested readers may wish to re-

fer to Steinmann's article of 1947 which probably represents the launch of the relevant debate.

The principal areas of production are on the island of Java and include the areas in and around the central Javanese sultanates of Surakarta (Solo) and Yogyakarta (Yogya), the coastal areas of Cirebon, Indramayu, Pekalongan and Lasem and the areas in and around Garut in West Java. Surakarta and Yogyakarta were the locations of the two powerful sultanates or principalities; each sultanate had its own Kraton or court which, in addition to being the residence of the local sultan and his extended family, acted also as a seat of government, religion and culture. Many traditional batiks were associated with the sultanates and, since Dutch colonial times, these have been known as "Vorstenlanden batiks" (Hann and Thomson, 1993). In terms of colour and patterning, these batiks differed from batiks produced elsewhere in Java or other parts of Indonesia. Batiks produced elsewhere in Java (as well as on adjacent islands such as Madura) are known collectively as *pesisir* or "coastal batiks". Even though two clear categories can seemingly be identified, each category can be further subdivided regionally into unique cultural domains, and each cultural domain can be seen to have its own unique characteristics or peculiarities expressed through the use of particular motifs, patterns and combinations. Some of the more important regional variants in the process and the resultant products were described previously by Hann (1992). The more important of these are identified below.

Colour combinations such as blue and white, red and white, red and blue, and red, blue and green were common on *pesisir* batiks but not on *Vorstenlanden* batiks. Further to this, shades of colours on *pesisir* batiks varied greatly depending on the workshop and its location. For example, the red on Indramayu batiks is generally not as bright as the red on Pekalongan batiks. *Vorstenlanden* batiks exhibit a rather more restrained palette of colours: rich browns, indigo blue, cream, white and black predominate.

*Pesisir* batiks show naturalistic compositions and include floral, animal and maritime themes.

*Vorstenlanden* batiks depict motifs and patterns which are considered to reflect Hindu-Javanese culture and include a small number of forbidden or *larangan* designs (from *larang* to forbid) which were restricted in use to members of the Kraton. The iconography of Central Javanese batiks retain much information relating to the ancient beliefs and religious philosophy of the Javanese people. Batiks from coastal regions of the north, on the other hand, show the acceptance of Chinese and European motifs and compositions (Hann and Thomson, 1993). Some of the more common motifs and patterns are identified below.

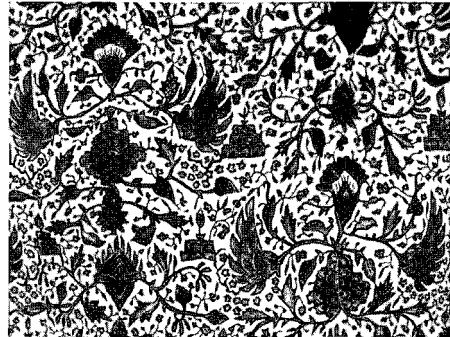
A common batik design associated with Java is the *tampal* (meaning patch or plaster) pattern. Traditionally identified as typical of Surakarta, Yogyakarta, Pekalongan and Cirebon, this pattern comprises a design field which is divided by a network of regular (or sometimes irregular) shapes with each filled by either a repeating pattern or else by a symmetrical or asymmetrical motif. The *tampal* pattern may have origins in the patched clothing sometimes worn by Buddhist monks as an outward expression of poverty (Hann and Thomson, 1993).

Another dominant pattern type, typically found on batiks from Surakarta and Yogyakarta, is the so-called *parang* (meaning dagger or chopper) pattern. Varieties within this pattern class were *larangan* designs and were restricted in use to the high ranking members of the Kraton. These patterns thus acted as insignia of social standing within Javanese society. Motifs of Chinese origin include the Chinese unicorn and phoenix, pairs of fish, cloud motifs, *banji* (swastika-shaped patterns) and a wide range of floral decoration probably sourced from imported Chinese ceramics (Hann and Thomson, 1993).

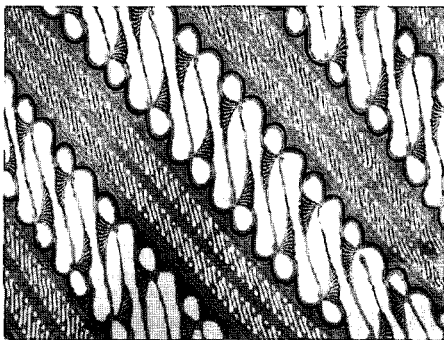
Occasionally variations or developments in the technique extended the range of decorative possibilities. For example, a common characteristic of traditional Indramayu batik design was the use of a coarse stipple effect as space filling or as a background between dominant motifs. This effect was achieved by a comb-like implement, with fine needles as teeth, which was used to produce tiny



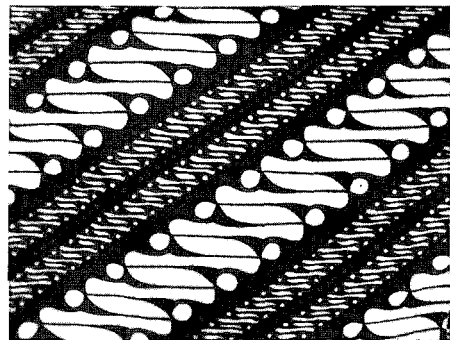
〈Fig. 1〉 Hand-drawn Tulis Batik,  
Java, Late-twentieth Century.



〈Fig. 2〉 Hand-drawn Tulis Batik,  
Java, Late-twentieth Century.



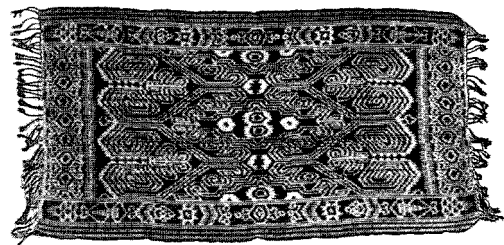
〈Fig. 3〉 Block Waxed Batik,  
Java, Late Twentieth Century.



〈Fig. 4〉 Block Waxed Batik,  
Java, Late-twentieth Century.



〈Fig. 5〉 Hand-drawn Tulis Batik,  
Java, Late-twentieth Century.



〈Fig. 6〉 Indonesian Ikat, Nmid-  
Twentieth Century.

openings in the solidified wax through which the dye could readily penetrate when the cloth was immersed in the dye bath.

## 2. Ikats

The word ikat is derived from the Malay (or Indonesian) word *mengikat* meaning to tie [Kramer

and Koen, 1993, p.265]. The ikat process is a resist-dyeing process, which involves the binding of sections of warp and/or weft threads with dye-resistant material (such as strips of palm leaf) prior to fabric construction. When immersed in a dye bath, the uncovered areas of the threads take up the dye. Further colours can be obtained by

successively rearranging the resist-protected areas and immersing the threads in the dye bath again. On completion of dyeing, the resist material is removed and the threads are arranged carefully before weaving. The resist may be applied to the warp, the weft or to both sets of threads. Resultant products are referred to respectively as warp-ikat, weft-ikat or double-ikat, with warp threads, weft threads or both sets of threads being patterned.

When used as clothing, ikats are worn in the form of rectangular shoulder or waist cloths, or as wrap-around skirts or tubular sarongs. In Indonesia ikats were considered to possess a myriad of ritualistic, ceremonial and spiritual functions. Referring principally to warp-ikats, Warming and Gaworski commented that they:

...have a ritual and spiritual value that extends beyond the mere physical object. Textiles are required for ceremonies, but not just as traditional dress for participants. The cloths themselves are a necessary part of the ritual. Warp-ikat cloths act as burial shrouds, as part of exchange of gifts before marriage, and as a way of preserving local history and legends (Warming and Gaworski, 1981).

The close relationship between textiles and culture extends to a time when many of the island peoples came into contact with a bronze-using culture originating in what is now the northern part of Vietnam (Warming and Gaworski, 1981). This Dong-Son culture, as it is known, was the source of certain styles of decoration which combined with indigenous symbols and motifs to provide the extensive range of designs evident in the warp-ikats produced in Indonesia in the past few hundred years.

Although the forces of Buddhism, Hinduism, Islam and, to a lesser extent, European colonialism had a dramatic impact on the culture and beliefs of the inhabitants of Java (the most densely populated island historically and in modern times) the lives of certain indigenous island peoples, even during the first decade of the twenty-first century, have remained largely unaffected since Dong-Son times [highlighted a few decades ago by Warming and Gaworski (1981)]. It is among these more remote communities that cotton warp-ikat is widely

dispersed. Weft-ikat production is less extensive and is evident in parts of Sumatra, East Java, Sulawesi and Bali (Kartiwa, 1987). Double-ikat weaving appears to be practised only in the Balinese village of Tenganan (Warming and Gaworski, 1981). Some of the regional variations in ikat design across the archipelago are highlighted below.

Variations in production procedures were widespread across the archipelago. The best-known cotton warp-ikats are those of East Sumba. Other important locations are Sulawesi, Timor, Sawu and Rote. Weft-ikat production was less extensive and was evident in parts of Sumatra, East Java, Sulawesi and Bali (Kartiwa, 1987). Among the most exquisite weft-ikats are those from the Palembang region of south Sumatra. Double-ikat patterned cloths were made in Tenganan, a village located in the east of the island of Bali (Warming and Gaworski, 1981). A range of weft-ikats was also produced on Bali. Some of the more important regional variations in technique and decoration are identified below.

Cotton warp-ikats from East Sumba are known as *hinggi*. Much valued as ritual and prestige objects, these were worn by men as waist and shoulder cloths. The principal compositional characteristic is a series of horizontal bands, three to eleven in number, containing a great variety of motifs derived from the realms of legend, sacred rite and such diverse foreign sources as Chinese porcelains or Dutch coins [Larsen, 1976, p.150] Probably the most common motif is the horse; its use in ikat decoration being a reflection of its past status in Sumbanese daily life as a measure of wealth (Warming and Gaworski, 1981). Another prominent motif is the so-called skull tree, a reminder of past ritualistic head hunting. Other common motifs include the shrimp, the snake, the Chinese dragon (believed to be adapted from imported Chinese ceramics), the rooster, standing human figure, deer, monkey, lizard, crocodile, fish, insects, sea horse, cockatoo and various other birds (Hann and Thomson, 1993).

Cotton warp-ikats were produced by the Toradja people of central Sulawesi. These invariably depict large-scale geometric patterns in blue, white and black against a dominant red background. The

geometry of the Toradja ikats has been interpreted as human figures in schematic form and has, on occasions, been considered to resemble some patterns produced by native North Americans (Gerlings, 1952; Larsen, 1976).

As pointed out by Kartiwa, trade in Timor cloths outside the area was long-standing, especially to non-weaving areas such as Irian Jaya (Kartiwa, 1987). Supplementary-weft decoration is often used in conjunction with warp-ikat. Brilliant red bands and stripes or large-scale blue ikat patterns are typical. Motifs include various birds, horses, lizards and human figures. As pointed out by Gittinger, subtle variations in decoration and technique, including tonal qualities of colour and variations in band width were apparent from area to area within Timor, but these variations were barely perceptible to the vast majority of outsiders (Gittinger, 1985).

The most important characteristic of ikat textiles produced on Sawu Island was that their designs denoted membership in a female-aligned clan system that controlled life-crisis rituals (Hann and Thomson, 1993). Delicate white geometric and floral motifs against a dark blue or black background are the principal decorative feature (Warming and Gaworski, 1981). Motifs were taken from Portuguese, Dutch and other European sources (Hann and Thomson, 1993).

Probably the most important single source influencing the design of Indonesian textiles is the resist-dyed cloths of India. Most renowned of these resist-dyed cloths are the double-ikat silks from Gujarat and Orissa. Such cloths featured as precious trade goods, and were traded extensively throughout much of South and Southeast Asia, initially through the activities of Indian, Arab and Chinese traders and, from the seventeenth century onwards, Portuguese, British and Dutch merchants who used them as exchange goods for precious spices such as nutmeg, mace, cloves and pepper (Sreenivasam, 1989). Their design had a profound effect on the design of ikats and other textiles in many parts of Indonesia. Known as *patola*, and produced in Orissa and Gujarat, they were used as temple hangings, bridal gifts and shrouds, and were worn

at court appearances, classical dance events, weddings and funerals (Weiner, 1992). The word *patola* (with singular *patolu*) appeared in various forms as early as the fourteenth century CE in India and in accounts of early-sixteenth-century European commentators. The latter documents are reviewed by Guy (1998). Not surprisingly, in coastal Indian towns such as Orissa, ikat designs were inspired by the sea and included various sea animals and fish. Flowers and stripes were also common and arrowhead-type effects were in widespread use on the borders of saris (Weiner, 1992). In South India, lotus blossoms, four-petalled flowers and swastika-type designs, as well as stylised peacocks, parrots, lions and elephants, were common (Weiner, 1992). Checks and squares containing small motifs were also used. Ikats from Gujarat commonly depicted diamonds and rosettes.

The influence of Indian *patola* cloth design can be detected in the design of textiles in many parts of Indonesia. This is notable in the case of warp-ikats produced on the island of Rote, in particular through the use of various octagon-shaped floral motifs, known as the black motif in Rote and as the *jelamprang* motif elsewhere in Indonesia (Gittinger, 1985). This motif can be detected readily on various Indian *patola* cloths.

In the western part of Flores, textile patterning was traditionally through the use of *songket* weaving (a supplementary-weft patterning technique discussed below). Elsewhere on the island warp-ikat patterned textiles were produced. A wide range of sources of patterning can be identified. In the isolated central region, the ikats produced by the Ngada are generally blue-black in colouring and show simple triangular, square and zigzag shapes, revealing very little influence from outside sources (Gittinger, 1985). Substantial foreign influence is evident in the textiles produced elsewhere across the island. In some cases European designs were adapted, or compositional arrangements typical of Sumba were imitated (Gittinger, 1985). The design of Indian *patola* cloths had a major impact here also.

The Batak people of North Sumatra produced cotton warp-ikats with simple arrowhead effects

or diamond shapes, in white against a single background colour. Among the most exquisite weft-ikats are those from the Palembang region. In terms of design, these ikats show a bewilderingly wide-ranging iconography. Motifs include complex arrangements of ship and mountain images, snakes, decorative floral and arabesque forms, as well as various geometric patterns (Gittinger, 1985). The most renowned of Bali's textiles are the double-ikat patterned cloths made in Tenganan, a village located in the east of the island. These cloths, which are known as *gringsing*, show a range of stylised floral and geometric motifs as well as various human figures. The style of the human figures has been compared to thirteenth- and fourteenth-century temple decoration in central Java, thus suggesting that similarly-patterned textiles may have been produced in Java in the past (Gittinger, 1985). A range of weft-ikats was also produced in Bali, showing not only geometric and floral compositions, but also various figural scenes drawn from Hindu mythology.

## V. Summary and Conclusions

On examining the decoration on traditional textiles produced across the Indonesian archipelago, it is readily apparent that certain motifs and patterns have been retained from ancient times, and others have been adopted from elsewhere and adapted within their new environment. There is great cultural diversity across the archipelago and ample evidence of cultural diffusion. Certain motifs can be sourced from early animistic and later Dong Son cultures. It is evident that the other motifs and patterns have their origins in the prevailing religions of the time: Buddhism, Hinduism and Islam.

In order to contribute further to theoretical frameworks associated with diffusion research, it seems worth developing further the concept of "cultural domains" which are best seen as receptacles for receiving cultural innovations. This concept could be of particular value if not restricted to a particular period or point in time nor a tightly specified region or area. They are thus flexible entities which

act as targets or destinations for diffusion and subsequent rejection, adoption or adaptation,

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