Cognitive Ethnography of Cultural Artifacts of Adu Mancung Weaving Motifs of the Suku Baduy Luar in Lebak, Banten

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Abstract. The purpose of this study is to examine how the Baduy Luar tribe creates Adu Mancung weaving and the values inherent in Adu Mancung weaving. This study employs a qualitative approach with a descriptive analysis to conduct a cognitive ethnographic study of the Baduy Luar tribe's Adu Mancung weaving motif. The research began with a review of existing literature on the Baduy Tribe. Observations were made in 2021 in Kanekes Village, Lebak, the home of the Baduy Luar people, and in-depth interviews were conducted with Jaro (local leader), guides, and Baduy Luar weavers. The results of this research is the Adu Mancung weaving motif holds sacred value for the Outer Baduy Tribe. This weaving is used in traditional wedding proposals, Tanam Padi, Kawalu and Seba ceremonies. This weaving is presented to the man during the "Nanyaan" event as an offering by the prospective bride. This weaving motif is made up of two contradictory triangles, so it is called Adu Mancung. The motif represents the couple's commitment to the Baduy Luar tribe's monogamous culture. The Baduy Luar tribe's woven fabrics are created by weavers using the "pakara tinun," a traditional weaving tool. From an early age, Baduy children are taught to weave as a culture passed down from generation to generation. This research is expected to serve as a reference for the Baduy Luar tribe's weaving and aid in preserving the Baduy Tribe's culture in the academic paper.

Key words: cognitive ethnography, pattern design, Adu Mancung, Baduy Tribe

1. Introduction
Cognitive ethnography as described by GD Kaur is a method for elucidating the various ways in which cognition emerges from actors participating in their specific settings, roles and relationships, social institutions, hierarchies, languages, and actor–artifact networks, among others. As such, it entails extensive observation of participants in their natural environments, an examination of tools and artifacts to ascertain their cognitive contribution, an appreciation of their roles and relationships to demonstrate the channels of information transmission among them, and their sense-making practices[1]. This research used cognitive ethnography to study Adu Mancung weaving motif of Baduy Luar Tribe. The Baduy tribe is an inland tribe that lives in Kanekes Village, Lebak Regency.
The Baduy tribe itself is divided into two parts, namely the Inner Baduy and the Baduy Luar, because of differences in obedience in holding the rules of life that their ancestors have set. In general, the livelihood of the Baduy Tribe is farming and weaving. According to AAP Megantari’s research, Baduy weaving is a type of weaving that focuses on the color image rather than the image itself. This characteristic is readily apparent in the visual, which is restricted to geometric shapes and lines. The Baduy people are solely concerned with color as the primary component of the weavings they wear. This is connected to the binding regulations of Benang Saba Warna and pikukuh, which dictate the shape of the motif. This weaving appears to be a representation of the Baduy cultural system and is associated with all facets of their lives[2].

Maftukha’s research shows four types of teke variations used in Ngalaksa ceremony by Baduy Tribe using qualitative methods with anthropological approaches. Her research includes Adu Mancung weaving as a part of clothing used in Ngalaksa ceremony by Baduy Luar Tribe[3]. While this research is focused to discuss Adu Mancung motif using cognitive anthropological approach. M Ridwan study Baduy Weaving using ethnomathematical approach to show the geometrical concept used in Baduy Luar’s weaving motifs that generally used symmetrical pattern[4]. While the pattern is considered as an abstract in mathematics and has no bearing on daily activities, this research demonstrates that the weaving motifs have a philosophy and deep meaning associated with their beliefs and culture. In U Suhud, T Tarma, and E Maulida’s research discussed Baduy Luar Tribe authenticity of their culture in a view of tourism perspective using mixed qualitative and quantitative approach. The research identified weaving is a part of civic life which states there are rules in a weaving activity due to local system and beliefs[5]. While this research tend to discuss more about the values in Adu Mancung weaving motifs.

This research aims to discuss cognitive artefacts such as communication and learning for the successors of the Suku Baduy Luar, which are passed down from generation to generation, both through weaving skills and the values attached to weaving, transforming them into something holistic and cognitive for the Baduy Luar Tribe. This research was conducted by doing observations to the Baduy Luar Tribe weavers in action and capturing and analyzing the value attached to the Adu Mancung motif for the Suku Baduy Luar based on their beliefs. Therefore, this research is hoped to help preserve the culture of the Baduy Luar Tribe, especially the Adu Mancung weaving motif in academic paper.

2. Method
This research is qualitative research with an ethnographic approach through cognitive anthropology. In this study, ethnography is used to conclude that the Baduy culture is related to weaving activities. In addition, cognitive anthropological analysis of the Adu Mancung weaving motif of the Suku Baduy Luar was also carried out. Participatory observations, interviews, in situ documentation were collected as the main sources, and besides that, literature was collected as reference material[6].

3. Result and Discussion
4. Baduy Luar Tribe
The Baduy tribe is one of the indigenous inland tribes of Indonesia spread over several locations in the Kanekes Village area, Leuwidamar District, Lebak Regency, Banten Province. The Baduy tribe is divided into two groups, namely the Inner Baduy and the Baduy Luar. The difference between the two sections is the rules that apply, one’s disobedience to the rules of the Inner Baduy Tribe can result in the transfer of a person to the Baduy Luar Tribe[7]. The topography of the village where the Baduy lives is hills and valleys. The language used is Sundanese, the Banten dialect, but the Baduy Luar people understand and can use Indonesian to communicate with people from outside[8].

4.1.1. The Origins and Beliefs of the Baduy Tribe
The Baduy tribe was recorded in an expedition conducted by CL Blume in 1822 in the Kanekes Village area, who thought that this tribal group was part of the Bedouin/Bedouin nomad tribe in the
Arab region who dressed using similar materials. The mention of the name Badui or Baduy continued to be used by subsequent inventors, including by Indonesian researchers who entered the area at the end of the 20th century[6]. The Baduy tribe is believed to be a native of Banten who was exiled by the Banten kingdom for rejecting Islamic teachings. During the on-site research, outside Baduy Tour Guide, Mr. Kirman said “they are descendants of the Prophet Adam | Prophet Muhammad doesn't exist | don't know them | That's why I don't believe it.” Meanwhile, according to another source, the Baduy people think that they are descendants of Batara Cikal – one of the seven gods believed to be in charge of maintaining harmony in this world. They believe in their area, which they call Pancer Bumi, the geographic center of the earth and where the first humans descended. Therefore, they take on the role of guardians of the earth's balance[9].

The area where the Baduy live is said to be believed to be a sacred area or mandala by the king at the beginning of civilization in this place, it causes every community to be obliged to maintain and maintain the environment based on the pikukuh or kabuyutan rules of Jati Sunda or more commonly known as Sunda Wiwitan, the First Sunda. as a way of life or religion[10].

They believe in life after death. Their daily actions and behavior show their level of trust. They always act honestly, avoiding jealousy, hatred, and other negative emotions that can harm their soul. The Baduy never take anything that doesn't belong to them, even though no one knows. God will watch their every move[10]. The Baduy people carry out Sunda Wiwitan activities to welcome the holy month of Kawalu by fasting for three months, namely Kasa, Karo, and Katiga; Ngalaksa, is a great Baduy celebration to congratulate Kawalu month for having passed three months of fasting. Ngalaksa also Lebaran; Seba, a Baduy community, visits the regional or central government to establish positive relations between the Baduy community and the government; Baduy people plant rice with angklung buhun as a tribute to Dewi Sri, a sign of prosperity; Kendit, 7 month pregnancy ceremony; A shaman/paraji will recite a new born baby; The perhehan/rescue ritual is held for newborns on the seventh day; Angiran, a ceremony held 40 days after birth; Shaving, circumcision, and naming are based on the dream of a shaman (kokolot). Akikah is done with chicken. The Baduy marriage system is based on matchmaking. Parents determine the potential partner, they are engaged without any love between them. The duo will wear “dumping clothes” obtained from the Baduy Luar[10].

4.1.2. Baduy Tribe Government System and Economic

The Baduy are largely ignorant of formal schools, although they have a well-developed system of government and business. Puun is the top position of the Baduy tribe in the government system. Puun must be of Inner Baduy descent; they establish the laws and all other aspects of their rituals. Each Baduy Dalam gang is led by a Puun. The government of the Baduy community operates through two channels: the customary and formal government, which oversees the relations of the Baduy community with outsiders and the formal infrastructure of the government. However, Puun's decision does not have customary law and criminal law in running his government, both Inner Baduy and Baduy Luar.

Economically, the Baduy community is independent in terms of clothing, food, and housing. They don’t buy rice; they cultivate it themselves. In addition, they do not buy clothes but weave themselves. The main livelihood of the Baduy community is farming in huma, which is commonly known as a field. The produce favored in this branch of agriculture provides for standard necessities, such as rice. The men's side business is the production of Koja and Jarog bags[11]. Usually, bags are made of tereub bark harvested from the forest, but some are made of synthetic rope. Currently, apart from making bags, men in the Baduy Tribe earn additional income by providing goods delivery services or acting as coolies to visit tourists. On Saturdays, Sundays, and throughout the holiday season, this service is often available at Ciboleger. When Baduy women are not working in the fields, they are weaving. The result is woven into scarves, headbands, and cloth of various sizes. The finished products of this weaving will be sold to visitors or for their own use.

5. Baduy Tribe Weaving
Baduy weaving is divided into two according to the community group where the weaving is used, namely Inner Baduy and Baduy Luar weaving. These two weaves not only have different meanings, but are also made in very different ways. The songket method is used to create various weaving styles, including the Jangkawari weaving and the Adu Mancung weaving. This songket technique is often used in Baduy Luar weaving because of the greater variety of fabrics. Meanwhile, the Inner Baduy weaving, which is often simpler, only uses ordinary weaving techniques. Women in the Baduy tribe are obliged to weave. Because, apart from providing necessities, weaving is a part of customs and culture that must be protected and preserved. Thus, training generations to weave from an early age serves as an effort to inherit culture, provide skills, as well as to ensure the sustainability of the weaving culture of the Baduy Tribe.

5.1.1. Materials and Weaving Methods of Baduy Tribe Weavers

According to Jaro Saija, the Baduy people fashioned their clothing even before the Dutch colonial era began. "Orang Baduy itu punya sejarah awal pada waktu itu tidak ada bahan dari ohh.. kanteh – terus itu dari pelah | busur pelah | terus ada lagi itu apa yang melakukan menanam kapas | ya sampai sekarang itu yang melakukan nanam kapas itu ada" Jaro Saija explained. In those days, Baduy clothing was woven from forest leaves. In comparison to cotton fiber materials, these lace fabrics have a significantly stiffer and rougher feel.

"Kalo pelah itu itu kayak rotan | dibesek | dijemur | ohh... direbus dulu baru dijemur". Jaro Saija also spoke about his childhood: "Saya ingat waktu dulu itu saya umur sekitar 5 tahun | waktu itu saya lihat ibu saya numbuk-numbuk daun pelah | terus saya berpikir kenapa tidak kalau kain tenun ini punya rekornya" Inspired by this story, Jaro Saija founded a Baduy festival event in 2015, which drew approximately 1,800 Baduy weaving artisans. The Lebak Regency Government sponsored the festival event, and in conjunction with it, a patent for Baduy woven fabric was confirmed.

Before beginning to weave, various items must be prepared. Begin by amassing the required tools and supplies. Tenun gendong, sometimes called as pakara tinun, is a type of loom employed by the Baduy[2]. Baduy tribes each have their own tinun master. According to the Baduy, this tool has existed since their forefathers established in the Baduy Tribe. Weaving expertise include the following:

- **Cacang** is a place for totoogan. As a support for the totoogan.
- **Totoogan** refers to the stage of weaving in which the warp thread is folded.
- **Dodogan** is a tool worn behind the weaver's waist that assists in maintaining the lusi warp yarn's tension.
- **Hapit** is the term used to describe the process of winding the completed weave.
- **Sisir** is a musical instrument made from an *honje* stick in the shape of a comb. The comb's length dictates the appropriate cloth size.
- **Limbuthan and jinjingan** serve to loosen the thread being braided. The waste and carry quantities are limited according to the number of colors in the weave in order to separate the colors and keep them from becoming confused during the yarn's transport after loading the weft.
- **Barera** is a sort of wood that is used to cleanly and tightly press the weft threads.
- **Rongrogan** is employed to stabilize the *barera* and facilitate its entrance into the warp.
- **Taropong** is a tool used to place the yarn during the weaving process.
- **Kincir** is used to revolve the thread, whilst used to wind it.

![Figure 2 Weaving using pakara tinun, traditional tools of the Baduy Tribe weaving](image)

Making Baduy weaving involves many stages, including yarn winding, which involves transferring the yarn from loose to small bamboo, which will later be used as weft; *Mihane*, which involves preparing yarn for weaving warp. The threads are positioned here to create the desired woven design. In addition, this stage determines the width and length of the warp as a rough estimate for making several strands of woven fabric; *Nyorokan*, which is the process of inserting the thread into the comb. The end of the thread is then wrapped around the *hapit*; *Ngaliar* is the process of straightening and smoothing the threads made by *nyorokan*; *Ngalingkap* is the process of winding a thread that has been carefully wrapped around the *hapit* so that it is ready to be woven; and *Ninun* is the last procedure. On the Baduy loom, there are two weaving procedures. The first is to tie and wind the end of the warp thread on the stud. The thread is then tied to a *hapit*, which doubles as a winder for the woven fabric. The second method is to connect the ends of the warp threads together, forming a tube with the woven fabric; *dilarak*, is the process of binding the remaining warp threads. The process of making Baduy weaving is similar to conventional weaving. Baduy weaving uses a rudimentary loom and uses the body to regulate the tension in the warp yarn. Ordinary weaving has been sold to the general public as one of the traditional souvenirs of the Baduy tribe.

5.1.2. **Color**

In terms of color in Baduy weaving, the Baduy people have a rule called *Saba Warna* related to the culture that developed there. In the *Saba Warna* regulation, there are six different colors, including black, blue, red, green, white, and yellow. These colors are defined as follows:
- **Hideung**/black relates to the living utensils used by the Baduy, and they continue to cook on wood-fired stoves.
- **Bodas**/white refers to the 'holiness' that is guarded by the Baduy Dalam community.
- **Beureum**/red symbolizes the Baduy people who still maintain their traditional lifestyle.
**Koneng**/yellow symbolizes turmeric which is often used as a natural dye for Baduy weaving at that time.

**Hejo**/green This color accurately describes the condition of the Baduy hamlet which is still beautiful and beautiful.

**Bulao**/blue is often mixed with black, as shown in the **Poleng** and batik woven motifs worn by Baduy Luar women.

If traced back, the colors that are only allowed to be worn by Baduy people have an indirect connection with their culture. So far, these colors have been associated with identity, community systems, technology, and beliefs, all of which are reflected in the culture of the Baduy tribe.

6. **Cognitive Anthropology in Adu Mancung Motives and Baduy Tribe Culture**

![Adu Mancung Weaving](image)

**Figure 3 Tenun Adu Mancung Bodas/White**

Adu Mancung weaving is generally in the form of a shawl with a motif on both ends. Baduy men usually use this weaving for traditional events such as weddings and rice planting ceremonies. This cloth is used as a belt to secure the Poleng Hideung which is draped as a sarong. The bride gives this cloth to the groom as a mandatory condition for the marriage dowry at the time of asking to accept the application. In Gajeboh Village itself there are only six people who are able to make this weaving due to the need for a special method. The time needed to weave the Adu Mancung shawl is much longer than the other type of weaving, it takes about 3 weeks to complete the Adu Mancung weaving.

Adu Mancung means "end to end" referring to the triangular shape whose ends are bumped against each other. The interpretation of the motifs on this weaving symbolizes the hope that the bride and groom can form a calm and lasting household bond. The Baduy people have a monogamous view in a marriage, they uphold loyalty to their partner which has been regulated for a long time in the Baduy **pikukuh**. For them, the couple must be faithful, trust, and love each other so that the household they create is eternal and a blessing. In marriage, after the woman submits this Adu Mancung weaving as a dowry, the man will give the woman cooking utensils as a form of mutuality as a married couple.

The process of making Adu Mancung weaving is one of the most difficult motifs for weaving craftsmen in the Suku Baduy Luar to make. Because the weaving method using a weaving expert requires patience, patience, and high attention, calculations are needed to make this weaving motif neat, consistent, and of good quality. Weavers make this weaving every day as long as there is enough sunlight to illuminate them during weaving. The addition of the Adu Mancung motif to the manufacturing process is carried out using the **songket** technique, namely by inserting threads of...
different colors from the basic weaving color, arranged in a triangular pattern with opposite ends, spaced between motifs by calculation and repetition of motifs at the ends of the shawl-sized weaving.

Weaving techniques are generally taught to female descendants from their teens and even children. Children pay attention to adults how to make weaving with weaving experts, then imitate and supervise so that the resulting weaving has good and decent quality. Because this weaving is related to the daily life of the Baduy tribe forever. Weaving is used as clothing, baby carriers, accessories, and even symbolic gifts given by the bride as discussed earlier.

6.1.1. Symbolic in the Adu Mancung Weaving Motif
Previously, it was discussed that the triangles that collide with each other in the Adu Mancung Weaving have the meaning of loyalty to their partners at the time of handing over the dowry for the event of asking or applying for marriage. In addition, in the process of life, a woman from the Suku Baduy Luar is dedicated all her time to making weaving until they are no longer able to weave at an old age. In the looms that he makes, all energy, attention, and time are poured out. Weaving for Baduy women is life – a habit – is their daily life.

The Adu Mancung weaving that is handed over to the Suku Baduy Luar man is used during traditional events, manifested by the loyalty of a woman from the Suku Baduy Luar, as a symbol of a man already having a man partner and as a tribute to dedication in the marriage relationship. Different from other weaving motifs that are used daily, the Adu Mancung weaving motif is one of the special weavings for the Suku Baduy Luar – a weaving that must be used during special occasions such as at the wedding itself, rice planting ceremonies, and other rituals.

7. Conclusion
The Adu Mancung Weaving motif has a sacred value that is intended for Baduy Luar men and is used during traditional and cultural events of the Suku Baduy Luar. The Adu sharp motif itself is devoted to the questioning event when applying before marriage as a dowry. The Adu Mancung motif is given and then used during traditional events, including the wedding ritual itself. In the Adu Mancung motif, a woman's loyalty from the Suku Baduy Luar is manifested as a symbol of a man having a partner and as a tribute to dedication in the marriage relationship. It can be concluded, the Adu Mancung Weaving Motif is an outpouring of all the energy, feelings, and time of an Suku Baduy Luar as long as he lives.

The simplicity of the Baduy people who live in Kanekes Village who hold pikukuh and believe that they are the guardians of nature – who take care of nature with a simple lifestyle that is holistically poured from a cultural artifact – woven cloth, especially the Adu Mancung motif of the Suku Baduy Luar.

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