Section: Original Article

# The Aesthetic Perception of Pua Kumbu Textile: A Holistic Exploration

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#### **ABSTRACT**

Experiencing art is a complex phenomenon to grasp. The difficulty in comprehending the Pua Kumbu textile relates to several factors influencing participants' aesthetic perception, such as art knowledge, gender, and cultural background. Individuals with all these factors can better comprehend the art piece's values. Thus, the purpose of this study is to use the ARS-Revised questionnaire to assess the aesthetic perception of 400 participants about the Pua Kumbu textiles based on their gender and background. The findings revealed that the participants' positive aesthetic perception of the Pua Kumbu textile was influenced by gender, background, and art knowledge. The aesthetic perceptions were received similarly based on gender, except for textile knowledge. Females, who exhibited more interest in creative arts, observed a greater aesthetic perception of the textile. Those from Sarawak, on the other hand, scored higher in factor 2 (textile knowledge) and could better relate to textile information (factor 3) than those from other backgrounds. Participants from Sabah demonstrated the lowest scores in both factors despite Sabah being situated in the same region as Sarawak, Borneo. The participant's gender and background significantly impact their knowledge of the Pua Kumbu textiles. Conclusively, the beauty of the Pua Kumbu lies in the eyes of the beholder, and those with art knowledge can perceive the textile more clearly with a more comprehensive understanding.

Keywords: Aesthetic Perception, ARS-Revised instrument, Culture, Pua Kumbu. Survey



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#### 1. INTRODUCTION

#### 1.1 Pua Kumbu Textile

The Iban community, known as the Sea Dayak in the State of Sarawak, is the largest group among the indigenous population of Malaysian Borneo (Wei, n.d). The Iban or Sea Dayak community once travelled Borneo as nomads. They were highly regarded for their courage and bravery, which reflected their reputations as fighters and head hunters (Hays, 2008; Sim & Khan, 2014). The Pua Kumbu textile, made of cotton, is the most famous textile among the Iban people in Sarawak. It is made using the weaving technique. People are usually bound to their customs and beliefs, and the understanding is well-matched and crafted in the Pua Kumbu textile. In most societies, weaving is often linked to women, and their status in the community can be identified based on the woven motifs worn. While most motifs

are visual representations of animals, plants, and even daily activities, others are more complex and abstract. Intricate patterns on the Pua Kumbu textile are often traditional and hereditary (Wahed et al., 2020).

The art of designing the Pua Kumbu textile design motifs is passed on from generation to generation, from mother to her daughter. Based on the study conducted by Kanyan and Zainurul (2015), appreciation is still received from the new generations of respondents, but only for its aesthetic values, not the understanding of the intrinsic meaning or beyond it. Most design motifs were inspired by the ancient forms connected to ceremonial rites and animistic values (Truna et al., 2021). Iban people are firmly bound to their customs and beliefs, as the understanding is well-matched and crafted in Pua Kumbu textile.

#### 2. LITERATURE REVIEW

### 2.1 Aesthetic Perception

Since the dawn of history, there have been numerous debates over how we perceive beauty. Aesthetic perception has always been about art and beauty, and the field has been dominated by the question of what affects how people see things. According to Bundgaard et al. (2017), the value of feelings towards visual arts prompts the reaction of human interest and creates aesthetic perception, which can yield beauty, aesthetic interest, or pleasure. They suggested that technically, the effects are obtained from two properties; 1) the visual complexity of colours, lines, shapes, patterns, object sizes, textures, and other elements to construct an art, and (2) the cognitive system of processing the visual arts.

High sensitivity is necessary to guarantee that the aesthetic process runs smoothly since any disturbance during the process would alter human perception (Simpson, 2000). To truly appreciate the aesthetic experience, the perceivers should be vulnerable to openness and attentiveness. To experience the pure aesthetic experience, there is a definite way to look, hear, feel and perhaps imagine an object or process that lends itself to a more profound experience (Simpson, 2000). Depending on the perceiver's perception, experiences received from the surrounding or the environment could be pleasant or unpleasant. Moreover, a perceiver's perception can change depending on the situation that they face at that moment. Fechner (1876) highlighted that the main components of aesthetic processing require stimulus, determined by comprehensive characteristics such as symmetrical or asymmetrical (Berlyne, 1971; Fechner, 1876; Jacobsen, 2010), the simplicity or complexity of visual art (Berlyne, 1970, 1971), formalistic and content (Redies, 2015), as well as novelty or familiarity (Berlyne, 1974).

The selection of preferences in every aesthetic art is detected by the choices of perceivers towards the visual complexity applied to it (Eysenck, 1940). The variety of elements applied to the visual arts object allows the perceivers to savour them artistically, or as defined by Eysenck (1997), an activity measuring 'good taste' (Eysenck, 1997). It is clear from Eysenck's that individuals make these decisions for themselves. Viewing the perceiver's acceptance of the piece of art depends on various aspects, including the visual complexity (Sun et al., 2018), the perceivers' art knowledge (Tschacher et al., 2015), and the perceivers' "aesthetic fluency" through direct learning and prior experience (Smith & Smith, 2006). Smith and Smith (2006) further explain that the interaction of aesthetic perception can be perceived when the aesthetic is effortlessly attached to the art knowledge, which is measured closely according to the perceivers' age, art training, and art education.

The artist is crucial in effectively communicating the message or information to the perceivers, which can lead to the correct form of perception among the perceivers. Great visual art can communicate its messages and content to all perceivers across all historical time periods (Zeki, 2011). Furthermore, learning about the artist's life story and historical context can help one better understand the context in which each work of visual art is meant (Cupchik & Gebotys, 1988; Cupchik et al., 2009; Nodine et al.,

2008). Guner et al. (2019) confirmed that things other than the visual arts, like experience and the art's authenticity (Benjamin & Jennings, 2010), boost and strengthen a person's sense of beauty.

#### 3. METHODS

The Art Reception Survey-Revised (ARS-Revised) version, an altered version of the Art Reception Survey questionnaire (Hager et al., 2012) was employed to assess the participants' aesthetic perception. The ARS-Revised contains a total of 21 items that measure four variables, including factor 1: Historical art knowledge, the technical skills in the making, and the attraction toward Pua Kumbu textile, factor 2: Knowledge and information and relation one has on Pua Kumbu textile, factor 3: Ability to process information depending on one's knowledge, and, factor 4: Positive attraction towards Pua Kumbu textile. On a five-point Likert scale ranging from 1 to 5, the items were rated (strongly disagree–strongly agree). As evidenced by the Cronbach's alpha value ( $\alpha$  =.925), the internal consistency of this questionnaire was rated as high.

A self-administered questionnaire with two sections was distributed to commercial buyers of the Pua Kumbu textile and tourists who visited Sarawak attractions such as the Kuching Waterfront, the Tun Jugah Foundation, and the Sarawak Textile Museum. Every visitor to these venues had an equal chance to take part. As a result, the simple random technique was used, and 400 people participated. In total, there were 178 male participants and 222 female participants. The participants were selected based on two basic criteria: they had to be above 18 and could comprehend either Malay or English. These requirements were set up to ensure that survey respondents could respond to and answer the questionnaire appropriately. The participants were asked to indicate their level of agreement with the instrument's statements, and their participation was entirely voluntary. Four factors were highlighted for the second section of the ARS-Revised questionnaire to seek the participants' responses to their aesthetic perceptions based on participant gender and background.

#### 3.1 DATA ANALYSIS

The gathered data were analysed using version 25.0 of the Statistical Package for the Social Sciences (SPSS). The data's normality was evaluated using skewness and kurtosis (ranging from -2 to 2) (Joseph Jr et al., 2010). Frequencies, percentages, means, and standard deviations were used to present the data. The art reception of the design motifs applied to the Sarawak Pua Kumbu was compared by gender and background of the participants. The gender differences were analysed using an independent sample t-test, while the background differences were examined using a one-way analysis of variance (ANOVA). The statistical significance level was set at .05 (p < .05) for a post-hoc Tukey HSD test to evaluate if there was a significant difference.

#### 4. RESULT

# 4.1 Socio-demographic characteristics of participants

There were 400 participants who were the visitors and tourists of the Kuching Waterfront, the Tun Jugah Foundation, and the Textile Museum in Kuching, Sarawak. All of them (N=400) completed the questionnaire, and none were rejected in this study. Most participants were female, 222 (55.5%), while the balance was 178 (44.5%) male participants. Most participants were 18 - 25 years old (31.1%) and more than 41 years old (22.8%). Some were 26 - 30 years old (19.8%) and 31 - 35 years old (14.0%), while the minority were 36 - 40 years old (12.3%). Thirty-four point five per cent (34.5%) of the participants were SPM (O level) holders, while 23.8% were diploma holders, whereas 11.8% had a bachelor's degree and 3.0% had a Master's degree. Those with PhD comprised 1.3%, and 17.0% had other foreign education (see Table 1).

Table 1. Socio-demographic characteristics of participants

Variable	Characteristics	N	%
Gender	Male	178	44.5
	Female	222	55.5
Age (years)	18 to 25	125	31.3
- ,	26 to 30	79	19.8
	31 to 35	56	14.0
	36 to 40	49	12.3
	> 41	91	22.8
Background	Sarawak	315	78.8
C	Sabah	19	4.8
	Peninsular Malaysia	48	12.0
	Others	18	4.5
Education level	SPM (O level)	138	34.5
	Certificate	35	8.8
	Diploma	95	23.8
	Bachelor's degree	47	11.8
	Master's degree	12	3.0
	PhD	5	1.3
	Foreign	68	17.0

# 4.2 Descriptive Analysis

Four factors have been analysed in the ARS-Revised questionnaire, demonstrating varying results. The highest factor detected in the study is Factor 1: Historical art knowledge, the technical skills in the making, and the attraction towards Pua Kumbu textile ( $4.22 \pm 0.732$ ), and the least was Factor 2: Knowledge and information and relation of one has on Pua Kumbu textile, revealed as the lowest factor ( $3.001\pm0.190$ ). The second highest is Factor 4: Positive attraction towards Pua Kumbu textile ( $4.19\pm0.741$ ). Factor 3: Ability to process information based on one's knowledge ( $4.06\pm0.751$ ) (see Table 2).

Factor 1 consists of five items: historical art knowledge, technical skills in the making, and attraction towards Pua Kumbu textiles. All five items revealed a high score (above 4), except for the item "I can relate this Pua Kumbu textile to its historical art context" (3.76±1.156). Factor 2 shows the knowledge, information, and relation to the textile. This factor displayed all six items have the lowest score (below 4). However, two items received a score of below 3; "This Pua Kumbu textile mirrors my own personal emotional state" (2.86±1.364) and "I can associate this Pua Kumbu textile with my own personal biography" (2.90±1.395). Factor 3 highlights the ability to process information of Pua Kumbu textile that depends on perceivers' knowledge. All five items indicated the highest score (above 3). Item 5, "This Pua Kumbu textile makes me curious," demonstrated the highest score in this group factor (4.25±0.876). The second highest item in factor 3 is item number 2, "I would like to learn more about the background of this textile" (4.17±0.888). Finally, the last factor in the ARS-Revised is factor 4, which highlights the perceivers' positive attraction towards this majestic textile, Pua Kumbu. This factor consists of five factors that indicate all items have the highest score (above 4), except for one item, "The weaver's manner in creating Pua Kumbu textile is fascinating," which scored 3.86±1.186. Item no 3, "This Pua Kumbu textile is pleasant to look at," had the most significant score in factor 4 (4.54±0.704).

Table 2. Descriptive data of all the items in ARS-Revised

No	Items	Mean	±SD
Facto	or 1: Historical art knowledge, the technical skills in the making, and	4.22	.732
	ttraction toward Pua Kumbu textile		
1	I can relate this Pua Kumbu textile to its historical art context.	3.76	1.156
2	This Pua Kumbu textile makes me think about my life history.	4.28	.865
3	The composition of the Pua Kumbu textile is of high quality.	4.34	.810
4	This Pua Kumbu textile is very innovative	4.39	.793
5	This Pua Kumbu textile features a high level of creativity	4.35	.897
Facto	Factor 2: Knowledge, information, and relation one has on Pua Kumbu		1.190
textil	e.		
1	I know this Pua Kumbu textile.	3.16	1.292
2	I have an idea of what the weaver is trying to convey in this Pua	3.07	1.353
	Kumbu textile.		
3	I can relate this Pua Kumbu textile to a particular weaver.	3.05	1.368
4	This Pua Kumbu textile mirrors my own personal emotional state.	2.86	1.364
5	I can associate this Pua Kumbu textile with my own personal	2.90	1.395
	biography.		
Facto	Factor 3: Ability to process information depending on one's knowledge.		.751
1	It is exciting to think about Pua Kumbu textile.	3.86	1.020
2	I would like to learn more about the background of this textile.	4.17	.888
3	It is fun to deal with this Pua Kumbu textile.	3.93	1.003
4	This Pua Kumbu textile is thought-provoking.	4.08	.930
5	This Pua Kumbu textile makes me curious.	4.25	.876
Facto	Factor 4: Positive attraction towards Pua Kumbu textile.		.741
1	The weaver's manner in creating Pua Kumbu textiles is fascinating.	3.86	1.186
2	This Pua Kumbu textile is beautiful.	4.48	.697
3	This Pua Kumbu textile is pleasant to look at.	4.54	.704
4	This Pua Kumbu textile thrills me.	3.92	1.114
5	I feel inspired by this Pua Kumbu textile.	4.14	1.064

# 4.3 Comparison of the ARS-Revised Four Factors with Participants' Gender and Backgrounds

Table 3 presents the ARS-Revised four factors by participants between gender and backgrounds. There were no significant differences in all factors between gender except Factor 2; male =  $2.87\pm1.151$ , female =  $3.13\pm1.210$ , p = .025 (p < .05). Meanwhile, for the background, there were no significant differences in all factors between background (p > .05) except Factor 2 and Factor 3. For all backgrounds, Factor 2 shows that Sarawak =  $3.23\pm1.129$ , Sabah =  $2.51\pm.995$ , Peninsular Malaysia =  $1.79\pm.799$  and Foreign =  $2.93\pm1.258$ , p = .001 (p < .05). Meanwhile, for Factor 3, all background scores are Sarawak =  $4.12\pm.726$ , Sabah =  $3.42\pm.816$ , Peninsular Malaysia =  $3.96\pm.608$  and Others =  $3.78\pm1.073$ , p = .001 (p < .05).

**Table 3.** Comparison of ARS four factors by gender and background (N=400)

	Factor 2	Factor 3	Factor 4
4.18, 0.70	2.87, 1.15	3.99, 0.80	4.09, 0.75
4.25, 0.76	3.13, 1.2	4.11, 0.71	4.27, 0.73
.323	.025*	.090	.016*
4.25, 0.72	3.23, 1.13	4.12, 0.73	4.22, 0.72
4.00, 0.75	2.51, 0.99	3.42, 0.82	4.09, 0.70
4.20, 0.68	1.79, 0.80	3.96, 0.61	4.06, 0.68
4.01, 1.06	2.93, 1.26	3.78, 1.07	3.99, 1.14
.280	.001*	.001*	.286
	4.25, 0.76 .323 4.25, 0.72 4.00, 0.75 4.20, 0.68 4.01, 1.06	4.25, 0.76       3.13, 1.2         .323       .025*         4.25, 0.72       3.23, 1.13         4.00, 0.75       2.51, 0.99         4.20, 0.68       1.79, 0.80         4.01, 1.06       2.93, 1.26	4.25, 0.76       3.13, 1.2       4.11, 0.71         .323       .025*       .090         4.25, 0.72       3.23, 1.13       4.12, 0.73         4.00, 0.75       2.51, 0.99       3.42, 0.82         4.20, 0.68       1.79, 0.80       3.96, 0.61         4.01, 1.06       2.93, 1.26       3.78, 1.07

<sup>\*</sup>Significant difference at .05 (p < .05),

#### 5. DISCUSSION

The participants' curiosity about the visual complexity of the formalistic applied and the adaptation of their environment sparked their aesthetic perception. Understanding the cultural values embodied in Pua Kumbu design motifs provided a more accurate assessment of aesthetic perception. Details of the discussion were elaborate on below.

## 5.1 The Aesthetic Perception of Pua Kumbu textile

In the ARS-Revised study, most participants agreed that the Pua Kumbu textile was attractive, captivating, and conveyed cultural values and traditions. The design motifs used on the textile effectively represented the cultural qualities of the people who made it, yet it also impeded the interpretation of the textile's significance. Several of them found this textile attractive, praising it for its colour and the distinctiveness of the design motifs used in its creation. Furthermore, they delight in acquiring Pua Kumbu textiles. For various reasons, some participants were reluctant to touch the textile. They thought the design elements used in the material were scary and uncomfortable because of the textile's visual complexity. Even though the participants were drawn to the Pua Kumbu textile, they made personal judgments about it, which might have led them to believe it is a spiritual material (Magiman et al., 2018).

# 5.2 Gender roles in Aesthetic Perception

Bloomfield (2015), who asserted that gender plays a crucial role in aesthetic perception, corroborated the current finding of this study. Female participants were more likely to be skilled in handicrafts, sewing, or weaving, as well as have knowledge of art. They therefore perceive the pattern motifs on Pua Kumbu textiles in greater detail than their male counterparts do. Additionally, female participants who are knowledgeable about the Pua Kumbu textile are probably curious about the specifics of the textile manufacture, putting their interpretation in a socio-cultural context (Housen, 2001).

The perspective of Pua Kumbu textile is highly influenced by gender roles, which play a vital part in its aesthetic perception. Females have the most in-depth understanding of weaving, and as a result, they can make the textile's most effective and in-depth judgments. Brown (2019) pointed out that there are more textile works by women than by male artists in the contemporary art market. Men are not unskilled or incapable of weaving. Still, one need not point to biology to explain why it is more common

Factor 1 - Historical art knowledge, the technical skills in the making and the attraction towards Pua Kumbu textile, Factor 2 - Knowledge, information, and relation one has of Pua Kumbu textile; Factor 3 - Ability to process information depending on one's knowledge, Factor 4 - Positive attraction towards Pua Kumbu textile.

to see women producing textiles. In more explicitly sexist eras of art history, the textile arts were a medium that women were permitted and encouraged to adopt (Brown, 2019).

# 5.3 Knowledge improves Aesthetic Perception

The background of the participants influenced their knowledge and information regarding the Pua Kumbu textile. Those from Sarawak scored higher on Factors 2 and 3 of the ARS-Revised, indicating that they were more likely to have art knowledge and to be able to relate information about Pua Kumbu textiles to their personal experience. This is pertinent because Sarawakians are the ones who produced this textile, and it is of great importance to them. The Pua Kumbu textile is symbolised as a prominent part of the Iban culture and is much more appreciated by Sarawakians than non-Sarawakian.

On the other hand, participants from Sabah had the lowest impression in both Factor 2 and Factor 3 in the ARS-Revised study. This discovery is fascinating since Sabah is on the same Borneo Island as Sarawak. The participants demonstrated they lacked art understanding or the ability to identify with the Pua Kumbu design motifs. In the same vein, some Sarawak participants cannot comprehend the Pua Kumbu intangible cultural heritage (ICH) due to the complex designs that have been implemented.

It is understandable if the Sabah participants were unfamiliar with the Pua Kumbu textile, particularly the design motifs. Naive perceivers would be drawn to the Pua Kumbu textile because of what is depicted rather than how the design motif was done. Leder et al. (2016) discovered that persons with no art knowledge would enjoy abstract art if information about the piece was provided to guide their interpretation (Pearce et al., 2016).

Meanwhile, the Peninsular Malaysian participants scored the lowest in Factor 2 (1.79.799) and the highest in Factor 3 (3.96.608), indicating that they were interested in learning more about the textile despite their lack of understanding of the ICH of Pua Kumbu textile. In this study, these individuals were less inclined to identify with the Pua Kumbu design motifs. Still, they were interested in learning more about them. This is because Peninsular Malaysia is located in a different area of Malaysia. They also have distinct cultures from ethnics from Sabah and Sarawak, which explains why they know so little about Pua Kumbu textile design motifs.

The participants classified as "others" were from various nations, mostly from European countries such as Australia, Canada, and New Zealand, and also an Asian country, Indonesia. When the two groups were compared, their abilities or information were much higher than those from Peninsular Malaysia. Sarawak's tangible and intangible cultures were introduced to tourists in Kuching, Sarawak. They travelled to the state because of the culture and prior knowledge of its noteworthy features, including culture and history. As a result, they were more likely to have a greater understanding of the Pua Kumbu textiles. The careful management of intangible assets may contribute to the long-term viability of intangible assets in a globalised environment (Du Cros & Salazar, 2012). It is thus necessary to realise the ambitions of maintaining ICH worldwide via a meaningful partnership between communities, tourism, and the heritage sector.

#### **CONCLUSION**

Experiencing art is a complex phenomenon to grasp. The difficulty in comprehending the Pua Kumbu textile is related to several factors that influence participants' aesthetic perception and related to factors such as art knowledge, gender, and cultural background. Individuals with these factors can better comprehend the art piece's values. As Pietras and Czernecka (2018) mentioned, people with art knowledge and a formal art education background have greater opportunities to build complex, sophisticated aesthetic judgment and interpretation strategies than people without art education training. In conclusion, this study demonstrated that the participants' aesthetic perception was objectively subjective and influenced by their art knowledge, gender, and cultural background. Participants who relied exclusively on the visual complexity of the design motifs without a thorough understanding of

the Pua Kumbu textile could not create favourable opinions. Educating the public about the Pua Kumbu design motifs is the most effective method of achieving the most extensive comprehension while also resulting in a positive aesthetic perception.

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All authors played an equal role in the writing of this paper.

#### CONFLICT OF INTEREST

There are no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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