

Designing Enggang Bungas Jewelry as a Cultural Expression of the Dayaknese in Kalimantan

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ABSTRACT

The Dayak tribe is a tribe with a very diverse cultural heritage and customs in Kalimantan. The Dayak tribe is known to have a variety of decorative arts with symbols and motifs adapted from the uniqueness of Kalimantan's nature, one of which is the Hornbill (rhinoplax vigil) symbol on its traditional jewelry. Traditional Dayak jewelry is often used in traditional ceremonies and daily activities. However, traditional jewelry derived from Hornbills has begun to be abandoned and replaced by modern-style jewelry. Therefore, it is necessary to introduce the cultural value of the Hornbill symbol to the young generation of the Dayak tribe so that cultural preservation can be expressed and its existence can be maintained. This research aims to design Hornbill motif jewelry that is integrated with contemporary touches and adaptation of traditional elements as a form of cultural expression of the Dayak tribe in Kalimantan. The design method used is the Design Thinking method with a descriptive qualitative approach, the data collection technique used is literature study and observation. The results of this research are in the form of a design of Enggang Bungas jewelry consisting of bracelets, ear cuffs, and necklaces. This research can contribute to the preservation of Dayak culture and become a form of media for cultural expression in Kalimantan.

KEYWORDS

Culture Fine Arts Design Software E-learning

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INTRODUCTION

Kalimantan is one of the largest islands in Indonesia which has a lot of cultural diversity and traditions that come from indigenous peoples, the indigenous indigenous people who inhabit the island of Kalimantan are called the Dayak tribe. Dayak is a common name for hundreds of Indigenous sub-ethnicities that have a variety of traditions, customs, languages, and habits that are different but have something in common, namely living on the island of Kalimantan. The term Dayak comes from the word 'Daya' which means upstream, this term refers to the habits of the Dayaknese who like to live on the banks of the Kalimantan river (Sabaniyah & Yuanditasari, 2024). The Dayak tribe has inherited various cultures and traditions that are rich in spiritual values, motifs, and symbols that are always related to the nature around Kalimantan, such as the hornbill motif (Pranoto et al., 2020).

Hornbills (*rhinoplax vigil*) are recognized by a very prominent and unique characteristic feature, which can be seen by the shape of their large beak, the dense and bright color of their feathers on certain sides, as well as beautiful horns and tusks (Hidayat, 2021). The Hornbill (*rhinoplax vigil*) has a deep meaning and philosophy for the Dayak tribe, often considered a symbol of glory, greatness, peace, unity, prosperity, and protection so the Hornbill motif is always presented in various Dayak arts and cultures (Fitriani et al., 2020). Hornbill motifs are often found on Dayaknese

household items such as home ornaments, household utensils, traditional weapons, clothing, and other ornaments (Marlina, 2019). One of the cultural elements that is closely related to the cultural arts of the Dayak tribe is a variety of jewelry arts such as necklaces, bracelets, and earrings. Jewelry with certain motifs such as Hornbills for the Dayak tribe in the past is a mandatory object that is used daily and during certain traditional ceremonies.

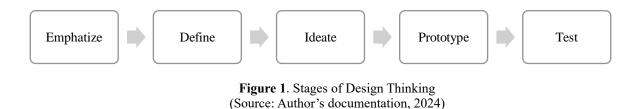
Based on previous research on traditional Dayak jewelry by Sinaga et al. (2024), it was found that the design of jewelry and crafts produced in Kalimantan today uses traditional production techniques and uses materials based on local wisdom such as bark, rattan, pig fangs, and hornbill feathers. Meanwhile, the design form of the existing jewelry is made according to the design in the past with a large and heavy size because it is intended as a typical Kalimantan souvenir. Then in the research of Febriani et al. (2020), It was found that typical Kalimantan jewelry products are currently designed using beaded materials patterned with ylang ylang flowers, crisp stems, and hornbills, this jewelry is used as a souvenir product because it is more in demand and bought by the outside community. Previous research shows that there is an opportunity to develop typical Dayaknese jewelry products by implementing the shape of the Hornbill into a more contemporary design and using types of materials that do not endanger the population of Hornbills and materials that are more in demand by the Dayaknese in the modern era, so that the cultural values of the Dayak tribe can be maintained, integrated, and adapted to changes in people's lifestyles in a more modern direction.

Along with the phenomenon of lifestyle changes that refer to modernization and globalization, the use of jewelry with traditional elements of the Hornbill motif is increasingly forgotten and abandoned. According to Viorentina et al. (2023) Lifestyle changes and the penetration of outside cultures have led to a decline in the interest of the younger generation in using Hornbill-patterned jewelry for daily use even during traditional elements such as Hornbills (*rhinoplax vigil*) must be inherited and introduced through the application of disposable objects such as jewelry to preserve the culture of the Dayak tribe.

Based on this phenomenon, an effective strategy is needed that can reflect, preserve, introduce and revive aspects of Dayak culture, one of which is through the design of Hornbill motif jewelry that is integrated with contemporary touches and adaptation of traditional elements. Therefore, this research aims to produce jewelry designs consisting of necklaces, bracelets, and earrings that can represent Hornbill motifs to be used by Dayak tribal people of various age ranges on certain occasions or in daily use so that the moral and cultural value of the sacred symbol of Hornbill can be preserved and maintained in today's modern era. It is hoped that the design of Enggang Bungas jewelry can preserve and reintroduce the spiritual cultural value of the Hornbill (*rhinoplax vigil*) in Kalimantan.

METHOD

The method used in designing Enggang Bungas jewelry is the Design Thinking method with a descriptive qualitative research approach. Rösch et al. (2023) define Design Thinking as a method of iterative innovation and a problem-solving process that refers to specific principles such as user needs by using creative thinking, visualization, and experimentation methods. Design Thinking is used to develop product innovation and the behavior of individuals or organizations by enabling a variety of design and cultural collaborations. According to Liu & Lu (2020) Design problem solving formulated with the Design Thinking method involves the process of producing, visualizing, selecting, and evaluating which is arranged in five stages, namely the empathize, define, ideate, prototype, and test stages.



According to Hasanah & Grahita (2024) Each stage in Design Thinking is interrelated, the emphatize stage contains observation and data collection related to design, the define stage contains the process of interpretation and elaboration of data collection results, the ideate stage consists of the process of formulating ideas to visualization, the prototype stage contains product visual design, and finally the test stage contains product trials. The results of the Design Thinking process are in the form of design documentation resulting in a representation of a design solution that is specifically shown to a specific problem (Kelly & Gero, 2021). In this design, the Design Thinking method is specifically used to initiate design solutions in the phenomenon of Dayak cultural expression in the modern era to increase the value of Dayak cultural products.

In the design of Enggang Bungas jewelry, descriptive qualitative research methods are used as an approach to phenomena and problems related to certain community groups. Qualitative research aims to understand a social phenomenon or phenomenon based on a complete picture of the phenomenon being studied (Nina Adlini et al., 2022). The data collection techniques used in this design are literature studies, observations, and interview to support design needs, the data collected is related to Enggang Bungas jewelry products and Dayak cultural expressions. According to Rajudin et al. (2020) Observation in the creation of works can be done directly or using the power of imagination based on the representation of real objects. In the study of the Enggang Bungas Jewelry, the real object to be observed is the Hornbill (*rhinoplax vigil*).

RESULT AND DISCUSSION

Jewelry as a medium of cultural expression and a medium for art preservation has been carried out through customs that require jewelry to be used by the community during certain ceremonies such as weddings and regional art dances. The Dayak tribe considers jewelry to be a wearable object that must be worn by a woman, so the daily use of jewelry by Dayak women has become a habit. As stated by Herdiana & Santoso (2018) The cultural characteristics of jewelry used daily by the Dayak tribe in the modern era often do not depict the meaning or symbol of the beauty of Dayak culture and the nature of Kalimantan. Therefore, in this design, the cultural elements of the Dayak Hornbill (*rhinoplax vigil*) will be developed and integrated with a contemporary touch to meet the needs of cultural expression media.

The result of the jewelry design in this study is named Enggang Bungas, the word 'Enggang' comes from the name of a bird that is considered sacred by the Dayaknese, namely the Hornbill (*rhinoplax vigil*), while the word 'Bungas' comes from the Dayak Banjar language which means beautiful, handsome, beautiful, and charming. Enggang Bungas jewelry is presented in a set of jewelry consisting of ear cuffs, bracelets, and necklaces. These three types of jewelry products are designed by adapting the shape of the Hornbill on each side.

In designing Enggang Bungas jewelry, the design process applied is emphatize, define, ideate, prototype, and test according to the design stage in Design Thinking, the following is the process of designing Enggang Bungas jewelry.

1. Emphasize

The first stage in this design is the empathize stage, this stage refers to the process of observation and literature study related to design needs. According to Atamtajani & Putri (2020) The main factors that need to be considered in a design are the characteristics of the individual who the user is targeting, the form adapted, the arrangement of elements, and the number of visual elements applied. Based on the results of the literature study and observation of the empathize stage, the factors needed for the design of Enggang Bungas jewelry can be described as follows:

- 1) The target users in this design are women aged 25 to 40 years who live in Kalimantan to be a daily object or for certain events, so the selection of size, color, and material will be adjusted to the concept of daily jewelry design but still highlight the shape of the Hornbill.
- 2) The shape adapted in jewelry design is the shape of the Hornbill, especially the shape of the beak and tail feathers which are typical symbols of the Dayak tribe.
- 3) The arrangement of design elements in the form of a beak and tail will adapt from the

morphological shape of the Hornbill.

4) The number of visual elements implemented in the design of Enggang Bungas jewelry consists of two main elements, namely traditional elements in the form of Hornbills and contemporary elements in the form of material selection, lock systems, and the main frame of jewelry.

2. Define

The next stage is defined, this stage focuses on the formulation of general and specific concepts in the design of Enggang Bungas jewelry based on the results of the needs analysis at the empathize stage. According to Bahri et al. (2023) user, functional, operational, ergonomic, and anthropometric aspects, visuals, materials, components, and layout are basic aspects that need to be considered in the design of a general and specific concept of a product.

Design	(source: Author's da	
Design Aspects	General Concepts	Special Concept
User	Women aged 25-40 years.	A woman aged 25-40 years who comes from the Dayak tribe of Kalimantan.
Function	As an everyday ornament.	Used as a daily ornament and a form of expression to recognize the beauty of Dayak jewelry culture.
Operational	The lock system on the Enggang Bungas jewelry set is made according to modern jewelry design.	The lock system on the bracelet uses a shaving- off system, the necklace uses the lobster clasps lock system, and the ear cuff uses an ear wrapping system.
Ergonomics and Anthropometry	The size of each product is made according to anthropometric data and Indonesian women's jewelry size standards.	The size of each product is made with a small and minimalist frame according to the jewelry size standard, while the main part is made of medium size.
Visual	Adapting the visual form of the Hornbill.	Adapting the shape of the beak and tail of the typical feathers in Hornbills (<i>rhinoplax vigil</i>).
Material	Using gold material.	Using gold material coated with rose gold color and equipped with gemstones.
Component	It consists of a main frame, a pendant, and a lock system.	It consists of a main frame and a lock system designed with a touch of modern jewelry, while the pendant is designed in the shape of a Hornbill.

Table 1. General concepts and design-specific concepts (source: Author's data, 2024)

3. Ideate

The next stage of designing Enggang Bungas jewelry is ideation. The ideation stage includes a more in-depth design process based on the results of the formulation of general and visual concepts at the define stage. According to Prayogi & Hendarto (2024) The design of an innovation product includes the process of analyzing shapes, design concepts, dimensions, colors, and materials, therefore in the design of Enggang Bungas jewelry, the design process will be implemented in accordance with the design aspects of the innovation product. This is so that the results of the design of the Enggang Bungas jewelry can be in line with the purpose of the research, which is to preserve the culture of the Dayak tribe through the media of cultural expression of the Hornbill. 1) Form Concept

In the design of Enggang Bungas jewelry, the main shape adapted is the shape of the Hornbill



according to the special concept of design that has been analyzed at the definition stage. The Hornbill is a sacred symbol that in the perspective of the Dayaknese beliefs is considered a blessing transmitter, the shape of the Hornbill's tail feathers by the Dayaknese is used as a complement to clothing that shows majesty and courage (Sahertian, 2021). Meanwhile, the Hornbill's head and beak are used as home displays and complements to traditional Dayak weapon shields depicting symbols of power, responsibility, and leadership. The two parts of the Hornbill, namely the head, beak, and tail, are the main shapes adapted in the design concept of the Enggang Bungas jewelry.



Figure 2. Hornbill (Source: mediabudayaindonesia.com, 2022)

2) Design Concept

Enggang Bungas jewelry consists of three products, namely ear cuffs, bracelets, and necklaces. The design style of Enggang Bungas jewelry refers to the modern jewelry design that is used daily by Dayak women aged 25-40 years. Traditional ornaments that are displayed only in certain parts with medium size give a simple impression so that they can highlight the cultural expression of the Dayak tribe in the form of Hornbill motifs.

The shape of the hornbill's beak and tail feathers, which are the main visual identity of the design, are implemented into the main pendant design on each product designed on the Enggang Bungas jewelry. The head and beak are at the top while the tail is at the bottom, then each part is given detailed lines that resemble the original shape of the hornbill's beak and feathers.



Figure 3. Enggang Bungas jewelry design sketch (Source: Author's documentation, 2024)

3) Material

The material used in Enggang Bungas jewelry is gold. According to Lestari & Rahardi (2023) jewelry for Dayak women symbolizes self-image so the more complete the jewelry and the higher the value of the jewelry used, the more beautiful and admired it is. Gold jewelry is considered the highest level of traditional jewelry because it can be used for a long time and has a high selling value. Therefore, in the design of Enggang Bungas jewelry, the material to be used is gold with a rose gold coating as a form of expression of a touch of modernity.

4) Dimension

Antryometry data is a basic aspect that is a reference in designing a product to create an ergonomic product. Based on anthropometric data of Indonesian women aged 25 to 40 years, the dimensions of the Enggang Bungas jewelry series products are as follows.

(source: antropometriindonesia.org, 2024)				
Types of Jewelry	Size	Information		
Necklace	46 cm	Fits adult size		
Bracelet	17.5-25 cm	Fits adult size		
Ear cuff	5.5-7 cm	Fits adult size		

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5) Sistem

In the design of Enggang Bungas jewelry, the lock system that will be used follows the type of lock that is often used in modern jewelry. Modern jewelry lock systems tend to be simpler but strong and not easy to come off (Herdiana & Santoso, 2018). In the necklace, the key system used is the lobster clasps system. Meanwhile, the lock system that will be used on the bracelet is a drawstring system. In the earcuff, there is no locking system used so the system used is non-piercing and ear wrapping.



Figure 4. Lock system of lobster clasps and shaved balls (Source: Author's documentation, 2024)

4. Prototype

The next stage in Design Thinking is prototype and test. The prototype of Enggang Bungas jewelry is designed using 3D visualization techniques to find out the real picture of the product before it is produced, while the test in this design is carried out in tandem with the 3D visualization process so that product trials are carried out using 3D modeling software. The prototype of Enggang Bungas jewelry consists of necklaces, earrings, and bracelets designed with the adaptation of the Hornbill shape and made of rose gold.

The shape of the necklace of the Enggang Bungas jewelry set is divided into two main parts, namely the shape of the Hornbill's head with its distinctive beak and the shape of the Hornbill's tail feather at the bottom. Hornbills (rhinoplax vigil) are implemented as pendant necklaces in the Enggang Bungas jewelry series.



Figure 5. Prototype of the Enggang Bungas Jewelry bracelet (Source: Author's documentation, 2024)

Furthermore, the shape of the bracelet from the Enggang Bungas jewelry series is similar to the shape of the previous necklace product. It consists of a head shape with eyes, beak, and horns



typical of Hornbills and a tail feather shape with circular details on the body of the main bracelet.



Figure 6. Prototype of the Enggang Bungas Jewelry bracelet (Source: Author's documentation, 2024)

The last product in the Enggang Bungas jewelry range is the ear cuff. The shape of the ear cuff on the Hornbill jewelry adapts from the shape of the hornbill's beak and feathers which is complemented by a small dangling chain detail as a representation of the character model of contemporary jewelry.



Figure 7. Prototype of the Enggang Bungas Jewelry ear cuffs (Source: Author's documentation, 2024)

5. Test

The last stage in this design is the test stage. The test was carried out through an interview method with 15 Dayaknese women aged 25-40 years to measure the exact size of Enggang Bungas jewelry and get reviews or suggestions related to Enggang Bungas jewelry, based on the results of the test stage, it was found that the exact size of the final size of Enggang Bungas jewelry products was obtained.

Table 3. Enggang Bungas jewelry size				
(source: Author's data, 2024)				
Types of Jewelry	Size	Information		
Necklace	42 cm	According to the standard size of necklace		
Bracelet	17.5 cm	According to the wrist size of women aged		
		25-40 years.		
Ear cuff	6 cm	According to the ear size of women aged		
		25-40 years.		

Based on the results of the interview, Dayaknese women aged 25-28 years on average liked the choice of Hornbill adaptation form and the choice of rose gold color in the Enggang Bungas jewelry series. Meanwhile, women aged 30-40 years prefer Enggang Bungas jewelry in silver and gold. The results of this test will be used for the development of the next Enggang Bungas jewelry series product.

CONCLUSIONS

Based on the results of the study, it can be concluded that the design of Enggang Bungas jewelry can be a model of cultural expression and a channel for cultural preservation campaigns of the Dayak tribe. Enggang Bungas jewelry designs that integrate traditional values and contemporary touches can be used by the Dayak community as daily objects or for certain events and become a medium for preserving the spiritual value of Dayak culture in the current modern era. Hornbill as the main cultural value element implemented in the design shows the strength and beauty of artistic diversity in Kalimantan, so that it can provide cultural insight to the younger generation. Through this design, it is hoped that Enggang Bungas jewelry products will not only be used as souvenir products but also as daily identity products used by the Dayaknese. The design of Enggang Bungas jewelry that implements the shape of the Hornbill has the opportunity to be further developed in other types of jewelry such as rings and earrings, in addition to other symbolic forms of Dayak cultural value such as crisp trees and ylang flowers can also be implemented in jewelry products as a medium of cultural expression typical of the Dayak tribe in Kalimantan.

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REFERENCES

- Atamtajani, A. S. M., & Putri, S. A. (2020). Supplying 2C (Critical and Creative Thinking) Basic Concept as an Effort to Build the Ventures of Vocational School Students in Product Design. *Proceedings of the 1st Borobudur International Symposium on Humanities, Economics and Social Sciences*, 1087–1089. https://doi.org/10.2991/assehr.k.200529.227
- Bahri, N. F., Ramawisari, I., & Putri, S. A. (2023). Design concept analysis of educational toys to stimulate early childhood fine motor development. *Jurnal Seni Budaya*, 21(1), 57–70. https://doi.org/10.33153/glr.v21i1.5058
- Febriani, L., Natadjaja, L., & Febriani, R. (2020). Perancangan Desain Kemasan Kerajinan Tangan Manik Dayak Sebagai Oleh-Oleh Daerah Kabupaten Bulungan. Jurnal DKV Adiwarna, 1(16), 11.
- Fitriani, A., Saman, M., & Mayasari, N. A. (2020). The Symbolism The Dayak Indigenous Peoples Of The Meaning Of Hornbills. *Belom Bahadat: Jurnal Hukum Agama Hindu*, 10(1), 24–39. https://doi.org/https://doi.org/10.33363/bb.v10i02.481
- Hasanah, Z., & Grahita, B. (2024). Design of the "Teman Tiroid" Mobile Application as Self-Monitoring Media for Thyroid Patients. *Gorga: Jurnal Seni Rupa*, 13(1), 75–76. https://doi.org/https://doi.org/10.24114/gr.v13i01.55538
- Herdiana, W., & Santoso, T. F. (2018). Perancangan Souvenir Beridentitas Tradisi Telingaan Aruu Khas Suku Dayak. *Mudra Jurnal Seni Budaya*, 33(2), 256–262. https://doi.org/10.31091/mudra.v33i2.309
- Hidayat, M. (2021). Analisis Simbolik Struktur Burung Enggang pada Masyarakat Dayak. *Jurnal Ilmu Budaya*, *18*(1). https://doi.org/https://doi.org/10.31849/jib.v18i1.7849
- Kelly, N., & Gero, J. S. (2021). Design thinking and computational thinking: A dual process model for addressing design problems. *Design Science*, 7. https://doi.org/10.1017/dsj.2021.7
- Lestari, D. P., & Rahardi, R. K. (2023). Makna Simbolik Aksesoris Pakaian Adat Pengantin Wanita Suku Dayak Kenyah Kalimantan Timur: Kajian Antropolinguistik. *EDUKASIA: Jurnal Pendidikan Dan Pembelajaran*, 4(2), 1287–1294. http://jurnaledukasia.org
- Liu, A., & Lu, S. (2020). Functional design framework for innovative design thinking in product development. CIRP Journal of Manufacturing Science and Technology, 30, 105–117. https://doi.org/10.1016/J.CIRPJ.2020.04.008

- Marlina, H. (2019). Kajian Semiotik Motif Pakaian Adat Dayak Kenyah Di Desa Pampang Samarinda Kalimantan Timur. *Ars : Jurnal Seni Rupa Dan Desain*, 22(1), 45–55.
- Nina Adlini, M., Hanifa Dinda, A., Yulinda, S., Chotimah, O., & Merliyana, S. J. (2022). Metode Penelitian Kualitatif Studi Pustaka. *Jurnal Pendidikan Edumaspul*, 6(1), 974–980. https://doi.org/https://doi.org/10.33487/edumaspul.v6i1.3394
- Pranoto, I., Adi Pratiswa, S., & Nandana Undiana, N. (n.d.). Motif Burung Enggang Gading Pada Pakaian Adat Dayak Kanayatn Kalimantan Barat. *Gorga : Jurnal Seni Rupa*, 9, 2020. https://doi.org/10.24114/gr.v9i2.18928
- Prayogi, S. F., & Hendarto. (2024). Eksperimen Alat Peraga Pendidikan Tentang Gempa Bumi dan Mitigasinya untuk Anak Sekolah Dasar Dengan Fitur Augmented Reality (AR). Jurnal Desain Indonesia, 6(1), 112–124. https://doi.org/https://doi.org/10.52265/jdi.v6i1.122
- Rajudin, Miswar, & Muler, Y. (2020). Metode Penciptaan Bentuk Representasional, Simbolik, Dan Abstrak (Studi Penciptaan Karya Seni Murni Di Sumatera Barat, Indonesia). *Gorga: Jurnal Seni Rupa*, 09(02), 262–272.
- Rösch, N., Tiberius, V., & Kraus, S. (2023). Design thinking for innovation: context factors, process, and outcomes. *European Journal of Innovation Management*, 26(7), 160–176. https://doi.org/10.1108/EJIM-03-2022-0164
- Sabaniyah, A., & Yuanditasari, A. (2024). Studi Transformasi Bentuk pada Desain Furniture Berbasis Budaya Lokal Suku Dayak Sebagai Wujud Pelestarian Kebudayaan. In *Jurnal Pengetahuan & Perancangan Desain Interior* / (Vol. 12, Issue 1).
- Sahertian, C. I. (2021). Sakralitas Burung Enggang dalam Teologi Lokal Masyarakat Dayak Kanayatn. *Epigraphe: Jurnal Teologi Dan Pelayanan Kristiani*, 5(1), 58–75. https://doi.org/10.33991/epigraphe.v5i1.202
- Sinaga, H., Eriawaty, E., & Putri, W. U. (2024). Analisis Pengembangan Ekonomi Kreatif Berbasis Kearifan Lokal Khas Suku Dayak. Jurnal Pendidikan Ekonomi (JURKAMI), 9(2), 371–381. https://doi.org/10.31932/jpe.v9i2.3602
- Sriyana, & Hiskiya. (2020). Makna Simbolik Perkawinan Adat Dayak Ngaju di Kota Palangka Raya. *Jurnal Anterior*, 20(1), 83–95. https://doi.org/10.33084/anterior
- Viorentina, L., Zivanka, M., & Kanaya, C. (2023). Rancangan Pengembangan Desain Kontemporer Baju Adat Suku Dayak Ngaju Dengan Teknik Laser Cut. Jurnal Folio, 4(2), 51–62. https://journal.uc.ac.id/index.php/FOLIO/article/view/4174.