

TRANSFORMING NORTHERN NIAS' *OMO HADA* TRADITIONAL HOUSE INTO PRODUCT PACKAGING

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Abstract. *Omo Hada*, a traditional house of the island of Nias, North Sumatra, is on the verge of extinction. The ability for locals to sustain their cultural heritage has weakened due to various factors. To remind, reintroduce, and reconnect Nias locals to their cultural heritage, the authors try to combine fundamental elements of the northern Nias *Omo Hada* traditional house with a modern object commonly found on a daily basis, which is product packaging. By using the ATUMICS method to transform this form of tradition, authors believe that the traditional essence in product packaging can be conveyed through visual graphics, while at the same time reliving the harmony of Indonesian culture and traditions. The implementation of traditional elements in the product packaging's design is believed to evoke a connection with its local consumers.

Keywords: Northern Nias, *Omo Hada*, product packaging, surface packaging design, transforming tradition

Abstrak. *Omo Hada*, rumah tradisional khas Pulau Nias, Sumatera Utara, sedang di ambang batas kepunahan. Rendahnya kemampuan masyarakat lokal untuk mempertahankan warisan budayanya disebabkan oleh berbagai faktor. Untuk mengingatkan, mengenalkan kembali, dan menghubungkan kembali masyarakat Nias dengan warisan budayanya, penulis mencoba menggabungkan elemen dasar rumah adat *Omo Hada* Nias utara dengan objek modern yang biasa ditemui sehari-hari, yaitu kemasan produk. Dengan menggunakan metode ATUMICS untuk mentransformasi bentuk tradisi ini, penulis percaya bahwa esensi tradisional dalam kemasan produk dapat disampaikan melalui grafis visual, sekaligus menghidupkan kembali keharmonisan budaya dan tradisi Indonesia. Penerapan unsur-unsur tradisional dalam desain kemasan produk diyakini dapat membangkitkan ikatan dengan konsumen lokalnya.

Kata Kunci: Nias Utara, *Omo Hada*, kemasan, desain permukaan kemasan, transformasi tradisi

Introduction

Background

Omo Hada is a traditional house originating from the island of Nias, North Sumatra, first built in 1715. There are three styles of the *Omo Hada* house, divided by their locations in North, Central, and South Nias. Frequent earthquake occurrences in Nias led the Niha, the native islanders, to develop a unique way to build an earthquake-proof house. Common features in all Nias traditional houses were that they were built by incorporating wood together without the use of nails. The houses were built on strong pillars with diagonal supporters leaning against the

vertical pillars. However, the Northern Nias style houses are well known for their unusual oval shape in the world of vernacular architecture. This house is not built wall-to-wall, but instead it stands freely. (Antar, 2013; Nias Heritage Museum, 2020)

As a form of cultural heritage, Omo Hada has slowly lost its cultural value, which is caused by various factors. The main factor is the absence of cultural inheritance, such as local wisdom or knowledge related to customary institutions, social institutions, and agriculture. Another perceivable factor is the unsustainable cultural preservation, such as the use of modern materials. Roofs of houses in Nias no longer use thatched palm leaves, but instead have been replaced with asbestos or tin roofs. Walls, which were once made of solid wood, are now replaced with brick or mortar (Nasruddin & Intan, 2018). After the tsunami in 2005, help from within and outside Indonesia was received. This also caused a concerning issue as the help did not consider Nias' cultural wealth and architecture. *Mazino*, a village known for having the oldest Nias traditional house, was secluded and listed as one of the world's monuments in 2000, 2002, 2004, and 2006 by the World Monuments Fund (World Monuments Fund, 2020). In 2009, modernization started to influence the village, as it became less secluded due to the post-tsunami road construction that led vehicles to reach the village easily (Antar, 2013).

The authors were inspired to transform the Omo Hada house of northern Nias into a modern object using the *ATUMICS* method of transforming tradition to preserve its cultural value and remind locals about their heritage. Product packaging is a common object to come across on a daily basis, so as the chosen object, it can be implemented universally by local businesses and is believed to have the ability to remind, reintroduce, and reconnect locals to the tradition of Omo Hada (Jarossova & Gordanova, 2019). In addition, Omo Hada's cultural value should be introduced to the public, from Indonesians to international foreigners as well.

Literature Review

Omo Hada

The uniqueness of the northern Nias' Omo Hada traditional house is that it is oval shaped and purely made of wood, joined and pegged, without the use of nails or screws. Skills of carpentry were introduced by a tribe that arrived at the island of Nias about 700 years ago by boat. It is shown that elements from ships and boats were incorporated in its architecture. The living area of the houses are built on strong pillars of wood logs placed vertically and diagonally about three meters high off the ground, standing on stone slabs, to prevent the wood from rotting. The slabs are flat on the ground, without any planted foundation, which allows its structure to adapt during earthquakes or storms. Thatched *sago* palm leaves for the roof cladding were placed on a similar vertical and diagonal beam structure (Nias Heritage Museum, 2020; Viaro & Ziegler, 2006). Ornamental and decorative elements of the house were woodcarvings that were commonly found on walls (Viaro & Ziegler, 2006). One woodcarving pattern that is frequently found in the exterior walls of the chief's dwellings are *ni'oafi-afi*, a geometric circle filled with a circular arrangement of leaves, symbolizing the nobility status of its inhabitant (Viaro & Ziegler, 2006; Hidayati, 2018).

In the village, the Niha as native inhabitants were known to be warriors. They are accustomed to apply warrior qualities in their daily routines and rituals. The whole layout of their village was built for defense, as well as the houses. All houses were built defensible. The house's entrance can only be accessed by a movable ladder that leads to a strong trap door, which is shut during the night to prevent danger. The living area has hidden access and does not incorporate any windows. However, walls on the front part of the house incorporate strong and sturdy bars, which are used to observe the enemy's movements. (Viaro & Ziegler, 2006)



Aside from being warriors, the Niha also had their own beliefs. The layout of their village not only considers danger from outsiders, but also their norms and beliefs. Several components of the village are believed to be part of a ritual. Megaliths were found near each house, and the positioning of each house followed a norm. Omo Hada was only one component of the village. (Viaro & Ziegler, 2006)

Atumics

The ATUMICS method was discovered by Adhi Nugraha as a tool to transform tradition. ATUMICS is an abbreviation of the words artifact (A), which is the object of tradition itself, then technique (T), utility (U), material (M), icon (I), concept (C), and shape (S), which form the six fundamental elements of the artifact into an ATUMICS atom formula (Figure 1). The idea of this tool was for craftspeople, designers, and artists to make new objects inspired by tradition. The six fundamental elements or ‘atoms’ are to be rearranged and combined by both modern and traditional aspects. (Nugraha, 2012)

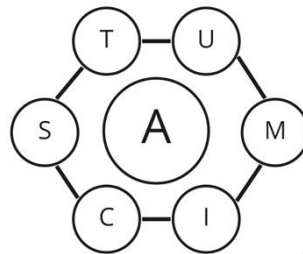


Figure 1 ATUMICS atoms

Table 1 ATUMICS fundamental elements [6]

No.	Fundamental Elements	Description
1	Technique	The production technique of the artifact, including skills and tools.
2	Utility	The functionality of the artifact’s form.
3	Material	The materials used to form the artifacts, whether it is natural, synthetic, etc.
4	Icon	What symbolizes and distinguishes the artifact from others similar to it.
5	Concept	Hidden factors within the artifact. In this case, norms, beliefs, values, etc.
6	Shape	The form, performance, and visual and physical properties of the artifact.

Design Method

This development retrieved qualitative data from various literatures to gain a deeper understanding of the objective, Omo Hada, before its transformation. The process of transforming tradition applies the ATUMICS method, which requires analysis on the tradition before mixing the modern and traditional elements. After the ATUMICS atoms mixture was defined, the product packaging design development was initiated through 2 stages of prototyping and testing. Prototype testing was conducted for the second prototype to the general audience using an online likert-scale questionnaire, considering the circumstances of Covid-19 health protocols during the time this research was held.

Result and Discussion

Atumics

Table 2 and 3 shows the fundamental elements from both artifacts. Northern Nias' Omo Hada traditional house as the traditional artifact, and product packaging in general as the modern artifact as we focus on the shape and surface of the packaging at first, before considering the function. The ATUMICS model shown on Figure 2 shows the formulation of elements that will be implemented in the new artifact with explanations on Table 4.

Table 2 ATUMICS of the traditional artifact

<i>Traditional: northern Nias' Omo Hada traditional house</i>	
TT	Joining and pegging
TU	Residence
TM	Wood
TI	<i>Ni'oafi-afi</i> pattern
TC	Prevention from war and natural disaster, spiritual beliefs
TS	Oval architecture

Table 3 ATUMICS of the modern artifact

<i>Modern: product packaging in general</i>	
MT	Folding
MU	Storage, promotion, decorative
MM	Paper, cardboard, etc.
MI	-
MC	Protects products
MS	-

In choosing the elements to be combined as a new artifact, researchers relied on what was most feasible for production and efficiency. As seen in Figure 2, all elements of product packaging in general (yellow atoms) were implemented to maintain functionality, while two fundamental elements of the traditional artifact (blue atoms) were applied – the *ni'oafi-afi* pattern and the oval shape.

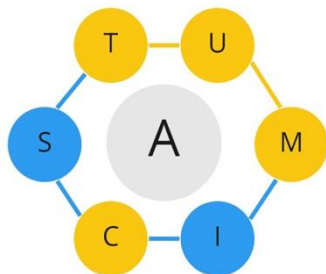


Figure 2 ATUMICS formulation of the new artifact

Table 4 ATUMICS of the new artifact

New Artifact: packaging design	
Technique	Folding
Utility	Storage, promotion, decorative
Material	Paper
Icon	Ni'oafi-afi pattern
Concepts	Protects product
Shape	Oval

Prototyping

Prototypes that respond to the new formulated atoms were created. To capture the essence of northern Nias' Omo Hada traditional house, researchers created Prototype 01, as shown on Figure 3, using cardboard and printed paper that copies the oval shape of Omo Hada (TS) and implements modified traditional Nias patterns of *ni'oafi-afi* (TI).

Evaluation: the packaging's lid was insecure and its production is quite complicated.



Figure 3 Prototype 01

The improvement of Prototype 02 maintains the oval shape (TS), but improves its mechanics and production efficiency. The packaging applied folding techniques (MT) using a single sheet of thick paper, fastened by a rope at the top to seal. The packaging's surface resembles patterns and materials found on the Omo Hada house, such as the thatched palm leaf roof cladding and *ni'oafi-afi* wood carving pattern (TI).

The execution of the prototype utilized computerized graphics by transferring non-digital illustrations to Adobe Photoshop to visualize its final results and maintain precise measurements. The structure of the packaging's shape was outlined based on the decided measurements to resemble the Omo Hada shape, which was oval. Illustrations that were made by hand were then imported to the software and applied to the packaging surface, creating a template.

Figure 4 shows the uncolored first sketch of the surface design to visualize the placement and proportion of visual assets. The sketch was then developed by adding colors that resembled Omo Hada, details of *ni'oafi-afi*, and illustrations that represented thatched *sago* palm leaves (Figure 5). After the digital visualization was created, Prototype 02 was printed and folded according to the intended shape as exhibited in Figure 6.

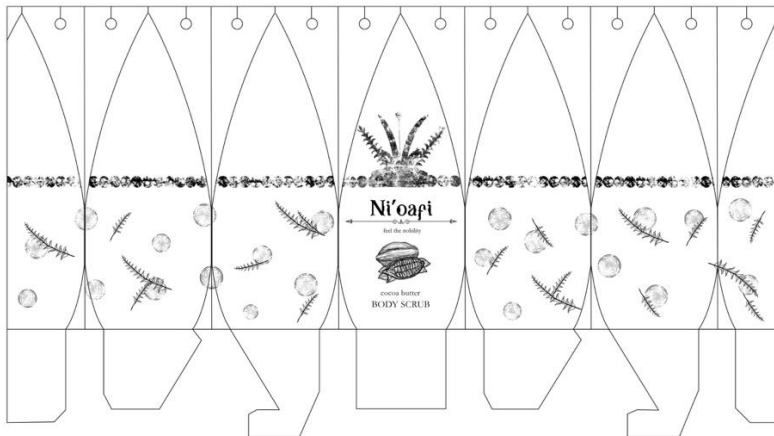


Figure 4 Packaging Template, Digital Sketch

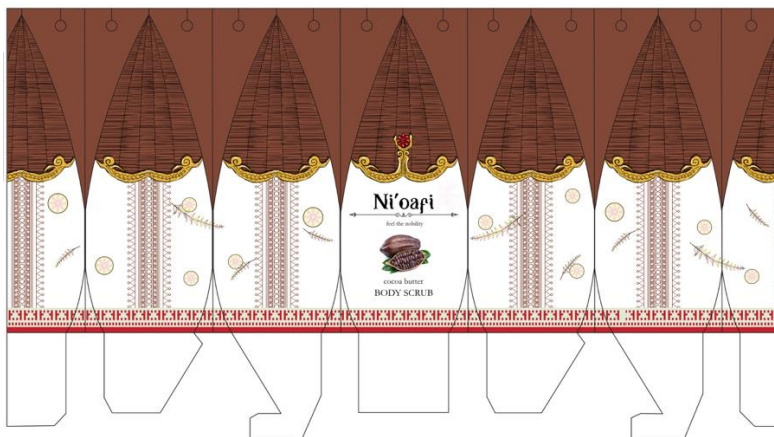


Figure 5 Packaging Template, Surface Design Alternative 1



Ni'oafi-afi
shape

Figure 6 Prototype 02

Testing

After Prototype 02 was produced, a survey towards the general audience was conducted to determine the packaging's quality (relating to its surface packaging design concept and mechanism), user's preference by presenting alternative surface designs (Figure 7), and the



attributes of transforming the northern Nias' Omo Hada into packaging. The questionnaire consisted likert-scale statements and 3 open-ended questions to obtain a wider perspective on the respondents' opinions and feedback (regarding preference). The online survey reached 85 respondents whom 58.8% were female and 41.2% were male. More than 80% of the respondents were between ages 17-30.



Figure 7 Surface Design Alternative 2

Survey results show that 45.9% of the respondents agreed the resemblance between the traditional and modern artifacts were perceived, while 48.2% strongly agreed. 50.6% of the respondents felt that the mechanism concept of this packaging was unique, acceptable, and efficient. When asked about preference between both design alternatives, a majority of respondents preferred Surface Design Alternative 1 because of Omo Hada's portrayal. However, multiple respondents also preferred the packaging design to be more colorful. Several respondents also suggested changing or adding patterns or colors to the rope.

Conclusion

According to the general audience, this surface packaging design prototype has fulfilled its visual aspect to resemble northern Nias' Omo Hada architecture. It is believed that this design can remind and reintroduce the artifact to modern locals, although a survey specifically targeted to locals has not been conducted. As ongoing research, the researchers intend to conduct a physical survey upon the recent prototype specifically towards local residents of northern Nias as the target since the goal of this research is to remind, reintroduce, and reconnect locals to their traditional architecture.

After going through a series of processes in making a packaging design that raises the values contained in Omo Hada's architecture, this packaging design is in the stage of providing awareness to the community of Omo Hada's local architecture. In the future, the visual graphics of this surface packaging design is expected to be implemented in any type of local product or food packaging to foster interest in Omo Hada, which in time gradually can return to preserving the local architecture, be it the Nias community or the wider audience. Helping the Nias community to maintain the sustainability of Omo Hada architecture is quite a challenge, because it requires the involvement of various disciplines to be able to maintain and preserve it.

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