



ADORNOGRAPHY AS ECOLOGICAL ARCHIVE AND CULTURAL NARRATIVE: HIMALAYAN TRIBAL ORNAMENTATION, SUSTAINABILITY, AND GENDERED AGENCY

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Abstract

The primary aim of this paper is to introduce *Adornography* as a newly coined concept within the theoretical framework for understanding body ornamentation, especially jewellery worn by Himalayan tribal communities as ecological and cultural texts that embody living traditions. Traditionally, Adornment Studies have primarily concentrated on aesthetic or anthropological aspects. *Adornography* shifts the focus to examining jewellery as a repository of ecological knowledge, gendered embodiment, and sustainable lifestyles. This perspective incorporates insights from fields such as ethnography, environmental humanities, feminist material culture theory, and literary analysis to present jewellery as both wearable art and performative ecological record. Moreover, the semiotic analysis underscores that ornaments can be seen as wearable genealogies and ecological record-keeping devices.

This paper further examines the emergence and significance of eco-friendly jewellery within India's contemporary socio-cultural context, especially in the Himalayan region, highlighting how jewellery plays a role in shaping identity. Traditionally, it has been associated with wealth, heritage, and aesthetics. However, it can be argued that jewellery is currently experiencing a paradigm shift where sustainability and social responsibility are now central to its production and consumption. The present study explores *Adornography*, which is defined as well as established as an interdisciplinary, future-oriented framework, making it possible to lay a foundation for sustainable cultural preservation in the Himalayan socio-cultural context.

Keywords: Adornography, Himalayan tribes, sustainable ornamentation, eco-ornamentics, gendered embodiment, indigenous ecological knowledge, cultural embellishment.

1. Introduction

A human body longs to be adorned, and a thing of glitter and colour catches its attention like nothing else. Jewellery is an aid that allows beauty to grow and thrive, and it exists everywhere around us. If one looks around, nature comes across as a heavily decorated space that has adorned



its creations so skilfully. The beautiful birds are adorned with wings that let them fly high up in the sky, while flowers are adorned with vibrant, blooming petals. All things in the world, including the Gods and Goddesses, are carefully adorned with precious jewels and gems. Primitive man found jewellery in things present in front of him, which meant his surroundings. Grass twigs and plants were utilised as jewellery items in the beginning. Even today, Tribal jewellery is mainly inspired by the natural products that nature has to offer. After the initial stage, people started with copper and iron, and as they progressed, they went ahead to turn to ivory and agate for adornment. With advancements taking place, gold and silver, along with other precious gems and stones, started being used for adornment. In the current scenario, all kinds of modern ornaments have evolved with newer designs coming into being.

Jewellery, thus, is something that is an inherent and urgent need of man. Rebecca Ross Russell explains, “Jewellery responds to our most primitive urges, for control, for honour and sex. It is at once the most ancient and most immediate of art forms, one that is defined by its connection and interaction with the body it lies on.” (Russell 1) In the Indian context, studying jewellery leads to fascinating explorations.

This research revolves around the innovative concept of Adornography, which views adornment as an eco-cultural archive that combines the material, embodied and narrative aspects associated with wearing jewellery. It recognises ornamentation beyond its decorative capacity and positions it as a dynamic text amalgamating gendered identities, ecological relationships, and intergenerational cultural memories. There are three essential dimensions to Adornography: *Material Ecologies*, which incorporates sustainable use of natural resources and traditional methods of crafting; *Embodied Meaning*, which investigates adornments as symbols of gender, identity and agency; and *Narrative Archive*, which explores the oral histories, rituals and cultural symbolism entrenched within jewellery. Collectively, these dimensions frame adornment as a developing ecological and social commentary that sustains and negotiates human-environment relationships embedded within the Himalayan tribal contexts. They also reflect upon practices such as eco-symbolism, adaptive artistry and cultural memory, which are integral to the Himalayan region. This approach helps in positioning jewellery as a tangible and intangible indicator of cultural heritage, moulded by aesthetic traditions, social values and environmental ethics.



Figure 1: Venn Diagram embodying the Adornography Narrative Archive



2. Ecological and Cultural Context of Himalayan Ornamentation

2.1 Historical Insight into Ornamentation

The people of India and jewellery share a deeply engaging relationship, evident right from ancient times, and all-important religious texts make mention of it. In the Vedic age, the term *ratna* was accepted as the meaning of jewel. In the first two hymns of the *Rig-Veda*, Agni and Rudra are portrayed as two important figures because they were the possessors of seven treasures. The mythical fire priest, Atri, remarks,

*“Bestow the seven treasures in every house,
Be a blessing to one two-footed
And a blessing to one four-footed.”*

From the ancient Harappan women to Mughal and Rajput princesses and majestic Kings with beautiful crowns, to the common Indian Folk of the present day, jewellery has served as a common space shared by all. In simpler words, jewellery and the desire to adorn the body are as old as mankind itself.

The historical background of Indian jewellery takes us back to the history of the country itself, and both are equally old, which is to say that ever since people started inhabiting India, jewellery came into being. The ancient Folk chose to wear a different kind of jewellery compared to that of the modern folk at present. Trends and materials may or may not have experienced minor or major modifications, but jewellery has been for over these centuries remained a dominant feature of Indian culture and history. Around 5000 years ago, the curiosity to beautify the self by adorning some jewellery pieces arose in people. The ancient kings and queens, the Mughal princesses and the common folk, the charm of jewellery has not been an alien concept to any. The love and indulgence in jewellery is nothing new to India, and traces of the same can be found in ancient texts and epics like *The Ramayana*, *Abhijan Sakuntala*, and *Silappadikaram (The Tale of an Anklet)*. Also, the excavations that led to the findings of the Harappan civilisation clearly illustrate the importance of jewellery in folklore.

As already stated, at a glance, the history of jewellery takes us back to human civilisation, for jewellery has existed ever since humans started inhabiting the earth. Early humans created jewellery from materials available in their immediate surroundings, such as stones, flowers, twigs and grass. Bholanath Bhattacharya explains that ornaments are loosely associated with riches. However, it has been observed that the earliest means of decoration were linked with gifts of nature and other ingredients that early humans could easily access (Bhattacharya 15). The tribal folk continue to hold on to this tradition of looking for jewellery around them till the present day. Bhattacharya further says:

"The folk people, especially the tribes of India, still follow the primitive mode of personal adornment of bones of animals, tusks of wild boar, the plumage of birds, hair, dried grass, wooden sticks and beads, feathers, glass beads, shells, leaves, stalks of creepers, dried fruits and gaudy colour, etc".

The concept of adornment is tied to nature and everything we see around us. Nature has always been the most significant source of inspiration, and jewellery, too, can be found in our natural surroundings, and literature makes specific mention of the same. Kalidasa's *Shakuntala*, for example, can be found wearing floral jewellery, such as flowers in the hair, which possesses a



seductive quality. [i] Primitive humans turned to nature to satisfy the inherent need to adorn the body. Thus, materials such as dried grass, seeds, flowers, stalks of creeping plants, pieces of bone and ivory were used for adornment. Next, wood, bronze and lead were utilised to create jewellery. After this phase, humans started using gold and silver. With modern advancements and cultural changes, jewellery traditions have undergone significant and major changes. However, it is worth observing that jewellery and culture are entwined together and go hand in hand. The two cannot be separated from one another because culture reflects jewellery traditions, and jewellery reflects culture.

Garlands and floral jewellery have existed ever since humans started inhabiting the earth. Even today, floral jewellery remains popular at Mehendi and Haldi functions during weddings, when the bride adorns it. Floral jewellery and jewellery made from usable items such as plastic, clothes, and flowers are eco-friendly and support the need to protect the environment. Eco-friendly jewellery can be defined as the kind of jewellery that is made from recyclable materials, gemstones, pearls and other items. Jewellery leaves an ecological impact, and diamond mines have reported several hazards. Thus, eco-friendly jewellery, in that sense, is also ethical jewellery that the wearer will not feel guilty wearing.

2.2 Contemporary Insight of Ornamentation

With sustainable and eco-friendly jewellery in use, wearers proudly wear the pieces, knowing their backstories of conservation, transformation, and empowerment, which enable them to feel beautiful and confident from the inside out. [ii] Though the concept of eco-friendly jewellery is not entirely new, recent developments point out that the inspiration to create jewellery can be found everywhere in the most mundane and unthinkable places.

Bholanath Bhattacharya writes:

"It is well-nigh impossible precisely to indicate where, how and when ornaments first came into existence, either by decorating the persons of human beings or to serve some other need or both. It is, however, universally acknowledged as a fundamental fact of the history of mankind that the use of jewellery predates even the primitive man's quest for a garment to wrap himself with. The recorded history of the existence of ornaments in the remote past. "

Though the origin and time of jewellery cannot be traced, it is believed that the tradition of wearing ornaments began even before humans started clothing their bodies. Rebecca Ross Russell argues,

"Body decoration is a ubiquitous phenomenon that transcends time and space. There is not one civilisation, however limited its available materials may be, that does not practice self-ornamentation." (Russell 1)

Indian jewellery explicitly originates in the cult of adornment worn by primitive humans. Jewellery pieces represent different periods, traditions, and geographical terrains, drawing attention with their exquisite beauty, unusual appearance, or sheer luxury. Several Jewellery historians and writers argue that the love of beauty and adornment is inherent in man and God-like. (Bhushan 1) Panini, the renowned grammarian, had mentioned details of a catalogue of ornaments in his work. In contrast, Kautilya had dealt with the jeweller's craft in extensive detail in his *Arthashastra*. *Mriccha Katika* (the Toy cart), a realistic drama of the 1st century B.C., penned by Sudraka, presents a description of a busy jewellery shop where all sorts of activities related to



all branches of Jewellery craft are discussed. *Amar Kosha*, the vocabulary from the 1st century B.C., provides details about the number of ornaments worn during the period. As per the *Amar Kosha*, the ornaments adorned by women right at the parting of their hair were known as *Balapashya* and *Paritathya*, forehead ornaments were called *Patrapashya* and *Lalatika*, ornaments attached to the neck (that looked like *kanthior tawiz*) were called Graibeyaka. (Bhattacharya 29)

3. Methodology

In the present context, where climate change and biodiversity loss are quite rampant, the ecological dimensions of the framework prove to be a crucial aspect. At a time when traditional ecosystems are crumbling under unprecedented pressures, it is the age-old ornamental traditions of the Himalayan communities that serve as a treasure trove of ecological knowledge. Over the years, these communities have developed intricate systems of sustainable resource management, seasonal timing, and environmental adaptation as an integral part of their material culture. The transition from traditional materials to more modern substitutes, whether spurred by conservation concerns, availability of resources, or financial constraints, represents a form of ecological narrative that *Adornography* seeks to decode and preserve.

Adornography, a term newly coined in this study, is the systematic reading, writing, and interpreting of adornments as eco-cultural texts. It approaches the act of ornamentation from a cultural and ecological perspective, rather than merely gauging it from a fashion and ethnographic documentation viewpoint. "*Adornography* deals with the writing, reading, and interpretation of adornments as eco-social texts. It suggests that body ornaments [are] not just passive accessories, but active narratives of sustainability, environmental governance, gender identity, and cultural memory."

In order to explore the concept of *Adornography* and its cultural and ecological significance in the study of Himalayan jewellery, this research will integrate a multidimensional methodology. It will incorporate the analysis of ethnographic data collected from anthropological accounts and contemporary field studies from the Himalayan region, along with the documentation of various adornment practices through the usage of visual ethnography and image citations in MLA format. The research will also examine select literary texts within the colonial and postcolonial framework, to assess the shifts in meaning and representation of adornment across cultures. To further strengthen the theoretical foundation, the critical concepts of material culture theory and eco-criticism will be applied to the study. Additionally, the data collected from community-based participatory research and artisan interviews will also be reviewed to understand the craftsmanship, indigenous knowledge systems and socio-ecological practices followed by the various Himalayan tribes.

4. Theoretical Framework: Adornography in Cultural and Ecological Context

4.1 Defining Adornography

The term Adornography can be understood as a fusion of two concepts, namely adornment and ethnography, blended with the suffix "*graphy*" to display and further analyse the descriptive and interpretive documentation of body ornamentation. Within this framework, adornment is not studied as a static object but instead as a dynamic, embodied text, one that is open for reading and



interpretation to further build ecological knowledge, historical narrative and socio-political positioning.

In scenarios where art history shifts away from form and function, Adornography emphasises inseparability as its approach recognises ornaments as what can be called “bio-cultural interfaces”, meaning that it makes it possible for human creativity to merge with environmental constraint and possibility.

This ecological reading of ornaments points out that there are layers of meaning attached to the very act of wearing jewellery, which often goes unnoticed by conventional aesthetic analysis. For instance, the patina that develops on silver jewellery in high-altitude environments can be perceived not merely as a sign of age but as a record of atmospheric conditions, humidity levels and the activities carried out by the wearer daily. Similarly, the seasonal availability of some plant-based dyes creates temporal rhythms in the production of ornaments that synchronise with ecological cycles.

4.2 Ontology, Substantiality, and Contextuality of Adornography

The innovative concept of Adornography examines ornamentation through the multidimensional lens of ontology, substantiality and contextuality. From an ontological perspective, adornments are seen both as objects and lived practices that reflect the human-environment relationship, as well as shape the identity and memory of a community. Substantiality focuses on the material and experiential aspects of ornaments, ranging from identifying the specific geographies of metals used in jewellery, tracing their crafting methods across generations, to understanding their role in maintaining cultural and ecological ties. Contextuality emphasises that the act of adornment gains meaning through its location, ritualistic significance, communal history and environmental changes. Together, these factors position ornaments as a repository of cultural evolution, community-based experience and environmental adaptation.

The ornamentation practices of the Himalayan tribes are not known for their aesthetic appeal alone. They are also a part of a larger eco-cultural framework; an argument that can be better exemplified through the key aspects of Adornography, as discussed above. Ontologically, Himalayan jewellery, such as *Gaddi* Silver or *Apatani* beads, serves as a marker of gender-based knowledge systems and ecological memory. Substantiality focuses on their material makeup, asserting how substances like silver, turquoise or plant-based dyes used in the jewellery are themselves a product of mining, sustainability practices or the changing climatic conditions. Similarly, Contextuality establishes them within their specific locales, traditions and regional history; determining how altering climate conditions, trade routes and globalization add symbolic meaning to them. This paper attempts to read Himalayan ornaments as eco-cultural texts by integrating these crucial principles of Adornography.

4.3 New Approaches in Adornography

Unlike previous approaches in material culture studies, Adornography aims to employ a more multidimensional perspective. Firstly, it is **eco-critical**, wherein it perceives ornamental motifs and materials as environmental data points, considering them as vessels for storing and transferring



ecological knowledge. From a **feminist** standpoint, it recognises women as the knowledge keepers and cultural innovators, in their roles as both symbolic curators and artisans.

Furthermore, Adornography proposes to be **intersemiotic** in its approach by creating a multi-modal analytical framework to examine the relationship between visual motifs, oral histories, and literary narratives. It also deploys an **actionable** dimension, acknowledging ornaments as indicators of sustainable policy and heritage preservation, making connections between academic analysis and community requirements. Lastly, Adornography aims to be **temporally expansive** as it considers ornaments as palimpsests that assimilate meaning across generations, while remaining efficient in the face of contemporary challenges.

5. Empirical Insights and Material Narratives of Himalayan Ornamentation

The Himalayan zone, consisting of India, Nepal, Bhutan, and Tibet, is home to a complex tapestry of tribal groups whose material cultures are strongly intertwined with the ecological environment they occupy. Here, jewellery is not just an ornament but a semiotic and practical toolkit: a system that symbolises environmental adaptation, kinship mapping, spirituality, and gendered identity. The deep ecological embeddedness of these ornamental traditions becomes quite apparent when we look at the lived experiences of contemporary artisans and wearers, whose connection with their material culture remains deeply ensconced in their ancestral knowledge systems and environmental responsibilities.

Himalayan Tribal Jewellery Practices: Case Studies

This section elaborates on specific case studies on Himalayan tribal jewellery, focusing on both their tangible craft details and intangible cultural significance, with special reference to their ecological implications.

5.1 Gaddi (Himachal Pradesh)

Gaddi women add a traditional silver chakra pendant adorned with Chamba mines turquoise to their attire. The round shape of the pendant symbolises both the Buddhist wheel of life as well as the solar cycles that are vital to pastoral schedules. (Sharma 114) The repoussé technique, incorporating floral and animal motifs, is used as a design element, representing fertility and protection. The pendants are usually made of silver, as it is not only beautiful but is also capable of withstanding cold mountain conditions. (Bhardwaj 72)

From an ecological standpoint, the ornaments worn by Gaddi women possess all the qualities suitable for the Himachal lifestyle. They are adaptable to extreme temperature and altitude changes, along with being aesthetically beautiful. (Thakur 212) The silver used in the jewellery has antimicrobial properties, which prevent bacterial growth during the monsoon season. Additionally, the turquoise extracted from the local mines represents the geological knowledge of the community, as it shows their awareness regarding suitable mineral deposits containing the most durable and beautiful stones. (Negi 41)



Picture 1: Silver Chak Necklace, Chamba5.2 Kinnauri (Himachal Pradesh)



Figure 1 Image citation: "Silver Chak Necklace, Chamba, Himachal Pradesh," Today's Traveller

Kinnauri adornment is among the most sophisticated examples of adornment complexity from the Himalayan region. The Kinnauri women usually wear multi-tiered silver headpieces (dejharu) and necklaces adorned with silver-copper alloys that help regulate body temperature and health in high altitudes. These ornaments are very heavy and are mainly worn during the festival of Phulaich. (Kapila 104) Beautiful motifs of the snow lion, which signifies the Buddhist symbol of fearlessness, often adorn this jewellery. Skilled goldsmiths from the Sangla and Kalpa villages usually protect their design secrets while making this jewellery. (Bhardwaj 81)

Perhaps, the following exchange between a contemporary Kinnauri woman and her mother

can best exemplify their relationship with ancestral jewellery: "I often tease my mother; '*Amma*, will you give me the *Daglo* (silver bangles) that your mother gave you when I get married?' And she retorts by saying, "I will give it away when I am old. For now, they are mine." Their playful banter reflects the complex temporal dynamics of ornamental inheritance, where ornaments can co-exist as carriers of past heritage, present possession, and future legacy. (Negi 53)

The work of traditional jewellery makers Padam and Bhagat, who hail from Kanam village, is an embodiment of deep ecological knowledge blended with traditional Kinnauri craftsmanship. As Padam Soni observes, "Not everyone can understand the value of our work." This "value" showcases their understanding of aesthetic appreciation, along with their knowledge of appropriate materials, time production cycles and their ability to create symbolic and functional pieces that can survive the harsh Himalayan environment.

The *daakpo* system is an exceptional type of ecological and social organisation that ties artisans to specific families over multiple generations. This system maintains the continuity of ornamental traditions while fostering mutual obligation and support that augments community resilience. Additionally, the *daakpo* relationship isn't merely a commercial exchange, but an indicator of ecological knowledge, seasonal coordination, and rich ornamental traditions.

The following Kinnauri ornamental categories reflect the ecological thinking of the region:

Tanaul - A very intricate hair ornament covering the forehead, just like a conventional 'ghunghat'. It hides much of the face, thus protecting the women from high-altitude solar radiation, while simultaneously maintaining cultural modesty codes. The local landscape of Kinnaur is often reflected through the motifs of mountain imagery used in the headpiece.

Chaak - Hair ornaments attached to braided hair, traditionally exchanged at weddings and passed down through generations of women. The assimilation of Chaak ornaments on a bride's hair depicts her ancestral genealogy as well as establishes the continuity of their community. The Chaaks owned by the Kinnauri women ensure their participation in the process of archive-making.



Jhutti - Usually attached to the hair braids, Jhuttis are bell-shaped ornaments, featuring ghunghroos (small bells) that produce sound upon movement. These sound elements facilitate coordinating group activities and designating ritual transitions during ceremonies.

Kontai - A form of traditional *jhumka*, Kontai is one of the few jewellery pieces from the Kinnauri tradition to be composed of gold. Yet, nowadays, artisans are switching to silver over gold, due to its antimicrobial properties and ecological benefits.

Chakphul - An unusual leaf-shaped ear ornament that reciprocates the layered development patterns of high-altitude vegetation. These ornaments illustrate how Kinnauri craftsmen interpret environmental observations as aesthetic forms.

The usage of raw materials sourced for the production of Kinnauri jewellery proves their ecological significance. While earlier materials were believed to be sourced from the ancient Silk Route, silver in the contemporary scenario is believed to be sourced from urban towns like Ambala and Delhi. This shift towards locally sourced materials has greatly affected the ecological footprint of Kinnauri adornment systems, due to their ability to adapt to adverse climate and high-altitude conditions.

Picture 2: Traditional Jewellery of Kinnaur

Figure 2 (Ethnographic detail from Voices of Rural India; Kinnauri ornaments often mark marital status and social rank.)



(Picture Citation: Traditional Jewellers of Kinnaur - Voices of Rural India)

5.3 Tibetan & Sherpa Communities

One of the most geographically extensive examples of ecological-material relationships in the Himalayan region is that of the Tibetan and Sherpa communities. This relationship is evident through their use of sustainably sourced precious stones and metals like turquoise, amber, coral and silver. This practice has originated through their well-established trade networks with Tibet, Nepal and Bhutan. The turquoise sourced from the Tibetan mines, coral from the Indian Ocean,



silver from several Himalayan resources and amber from the Baltic deposits signify the growing ecological relationship of these communities on a global scale.

The motifs that adorn the Tibetan and Sherpa jewellery are symbolic of ritual protection and the Buddhist ideals followed by their community. The lotus motifs, for instance, signify the Buddhist philosophy that beauty can emerge even from the most challenging conditions. The motif of the conch shell, on the other hand, is a reference to the marine ecosystems that the Himalayan communities can rarely experience. They depict the community's awareness of ecological interconnectedness across vast distances, thus encouraging stronger networks of ecological obligation and trade relationships. This symbolic practice of ornamentation clearly exemplifies the connection between environmental responsibility and human adornment and also encourages preservation of environmental resources, rather than focusing on their exploitation.

Additionally, the Tibetan and Sherpa jewellery also transcends geological time as they use amber that is collected from centuries-old deposits. It connects the artisans and wearers with ancient forest ecosystems that encourage serious contemplation about future ecological relationships and responsibilities.

5.4 Monpa (Arunachal Pradesh)

Monpa jewellery is a combination of turquoise, coral, and yak wool that signifies Buddhist cosmology, high-altitude ecology, and local pastoral economies. (Dutta 59) Yak horn amulets, composed of naturally shed material, reflect a zero-waste ethic. The Monpa jewellery sets usually represent family heirlooms that are blessed before the marriage, thus binding environment and kinship together.

The Monpa jewellery is a representation of the "Buddhist ecology" - a philosophy that synthesises spiritual practice with ecological responsibility. The employment of naturally shed yak horn exemplifies their advanced understanding of animal well-being. (Chophel 133) This practice illustrates the Monpa belief that taking life unnecessarily, even for ornamental reasons, can lead to negative karma affecting both individuals and communities.

Moreover, the addition of coral to the Monpa jewellery is an indication of the ancient trade network between the high-altitude regions with the coastal areas. This long-distance trade relationship denotes an early model of ecological interconnectedness, highlighting the interdependence of highland communities with the marine ecosystems. (Pema 88) Since coral reefs have been facing unprecedented harm due to climate change and ocean acidification, Monpa communities have transitioned to sustainable alternatives like carved bone and specially treated wood to replicate the look and symbolic significance of coral. (Dutta 67)

5.5 Nyishi (Arunachal Pradesh)

The case study of the Nyishi community is an outstanding example of adding new layers of meaning to conventional ornamental practices. For instance, the ceremonial headgear worn by Nyishi men was previously carved out of hornbill beaks, but conservation laws led to sustainable substitutions like carved bamboo and resin. This substitution facilitated maintaining the semiotic power of the hornbill motif while attempting to align with biodiversity ethics. (Furer Haimendorf 112)



The Great Indian Hornbill (*Buceros bicornis*), one of the keystone species of Northeast Indian forests, plays a crucial role in seed dispersal and forest regeneration. Due to its habitat loss and hunting value, the conservation laws prohibited its use in Nyishi ornamental practices.

Rather than abandoning their ornamental traditions, Nyishi artisans developed unique methods to replicate the visual and symbolic aesthetics of the hornbills. They used carved bamboo alternatives to achieve the distinctive curve and colour of the hornbill beak. Simultaneously, they incorporated resin due to its moulding quality to replicate the original bird with precision. This practice also displays their understanding of bamboo growth cycles, harvesting methods, and carving techniques that make it suitable for making jewellery. The usage of resin in jewellery is evidence of their extensive knowledge of sustainable resin resources and moulding techniques to create durable objects for ceremonial use. (Jacquesson 84)

The symbolic reinterpretation of hornbill imagery in Nyishi ornamentation also mirrors shifts in the human-wildlife relationship, in the context of conservation. It shows the community's commitment to biodiversity conservation, while maintaining their traditional power and prestige. This evolution also displays their willingness to adapt to the contemporary environmental challenges.

5.6 Apatani (Arunachal Pradesh)

The Apatani ornamental system is one of the best examples of agricultural ecological knowledge embedded in material culture. The traditional yaping hullo (nose plugs) and bead necklaces worn by the Apatani women comprise motifs that symbolise fertility, the moon cycles, and rice cultivation. (Blackburn 142) The beads in the necklaces are restrung by generation after generation, accompanied by ritual storytelling stemming from ecological and cultural memory. Even the smallest bead carries within itself motifs of fertility. This practice creates opportunities for the transmission of intergenerational knowledge that is far more meaningful than ordinary ornamental techniques. It becomes a vessel for transferring useful agricultural knowledge, seasonal observations, and substantial ecological wisdom among the younger generations.

Though the famous nose plugs and facial tattoos are no longer adorned by the younger generations of the Apatani women, the beads present in them often symbolise the rice cultivation practices of this community. This unique agricultural practice of integrated rice-fish farming facilitates in development of a high-yielding ecological system that can sustain in the high-altitudes of the Ziro Valley. (Bouchery 67) Motifs depicting unique fish shapes, rice grain patterns, and water flow designs are depicted in the jewellery, signifying these innovations in agriculture. The ornamental ceremonies often coincide with the agricultural cycles, thus strengthening the relation between human adornment, environmental health, and efficient agricultural practices.

Additionally, the lunar motifs in Apatani jewellery showcase the community's knowledge of the different moon phases and their impact on agriculture, human fertility, and environmental processes. The lunar cycle is also significant for the organisation of particular ceremonies, creation of new jewellery pieces, and the wearing of specific ornamental configurations that point towards the community's agricultural decision-making. (Furer Haimendorf 188)



5.7 Khasi (Meghalaya)

Women from the Khasi tribe wear a special piece known as the paila, containing multiple strands of coral and glass beads, meant specifically for dances and harvest festivals. The paila is a great source of ecological adaptation as it incorporates beads from plants like *Mikania micrantha*, in the present context. (Gurdon 54) In Adornography, these material changes are interpreted as environmental chronologies inscribed in craft.

The usage of *Mikania micrantha*, commonly known as bitter vine or Chinese creeper, to construct Khasi jewellery is an innovative approach adopted by the community. This aggressive species of plant threatens native biodiversity across Northeast India. But, its skillful treatment as an ornamental material instead of an ecological threat demonstrates the creative ecological management and great capabilities of the Khasi artisans. (Syiemlieh 122)

Women are considered to be the main contributors to the cause of adaptive and innovative resource management in the Khasi community. They not only control properties, but also contribute significantly to making key decisions about resource management and rapid adaptation to the changing environmental conditions. The Khasi women's use of sustainable and natural materials to make their jewellery is an indication of this. (Nongbri 63)

6. Discourse on Adornography and Sustainable Ornamentation

6.1 Adornography and New Materialism

Adornography resonates with Karen Barad's agential realism, which places matter as performative rather than static. According to this theory, Himalayan jewellery is not merely a piece of adornment but an "intra-active" entity that co-constitutes meaning with respect to its connection with bodies, environments, and cultural practices. For example, the silver in a Gaddi chakra pendant not just reflects light; it is also an active contributor in the construction of identity, spiritual protection, and social belonging. This interpretation surpasses the traditional subject-object distinction and considers objects to possess what Jane Bennett terms "thing-power", i.e., the ability of material objects to function as essential forces within assemblages of meaning.

Theoretically, adornography identifies ornaments as what Donna Haraway would refer to as "companion species" objects that co-exist in a meaningful relationship with human communities, representing and shaping the very cultures they adorn. This perspective subverts the anthropocentric interpretations of material culture by stipulating the agency of metals, stones, and organic materials in cultural creation. The environmental implications are deep: if materials have agency, then sustainable practices must take into consideration the "needs" and "desires" of the materials themselves, including their seasonality, their environmental consequences, and their position within larger environmental ecosystems.

6.2 Temporal Layering and Palimpsestic Reading

Adornography proposes the idea of "temporal stratification" in material objects. It believes that ornaments assimilate meaning across generations through the process of wearing, repairing, and recontextualization. For example, a Kinnauri headpiece passed from a grandmother to her granddaughter carries the memories of each woman, the historical events, as well as the environmental shifts documented by it, besides its symbolic coding.



The ornaments thus serve as palimpsests that carry fragments of previous meanings buried under newer inscriptions. This adds a “palimpsestic materiality” to them. The theoretical framework established here borrows from Genette's concept of the palimpsest, while making a shift from textual analysis to material culture studies. Every time a neckpiece of Apatani beads is strung back together, or a Tibetan amulet is repaired, or endangered materials are substituted with environmentally friendly alternatives, it inscribes a new layer of meaning while maintaining the remnants of the previous ones.

This palimpsestic reading is quite crucial from an ecological perspective. Due to constant environmental changes, the communities learn to adapt their ornamental practices, which lends a new dimension of meaning to them. For instance, the replacement of traditional coral with sustainably harvested resources forms a palimpsestic layer that engages both conservation ethics and cultural continuity.

6.3 Adornographic Temporality and Chronotope

Drawing on Bakhtin's theory of the chronotope, Adornography locates specific temporal-spatial configurations within ornamental narratives. Ornaments worn during traditional ceremonies are indicators of the “ritual chronotope”, denoting the time-space relationship. For instance, a wedding necklace is a symbol of ancestral presence, while simultaneously indicating present transformation and future continuity.

Similarly, ornaments adorned during seasonal ceremonies represent the "ecological chronotope", as they record and respond to environmental rhythms, depending on either the agricultural cycle, materials that correspond to the different climatic patterns, or designs that transform according to biodiversity changes. Additionally, the "genealogical chronotope" functions through patterns of inheritance, where ornaments act as temporal bridges for connecting the past and future generations while rooting identity in the present.

These chronotopic configurations show how Adornography works as a form of "wearable literature"; texts that live not on pages but on bodies, depicting complicated temporal relationships through material presence instead of verbal speech. Among these, the ecological chronotope is quite significant as constant climate change, seasonal shifts, and ecological destruction continuously affect the communities and their relationship with ornaments.

6.4 Intersectionality and Embodied Semiotics

The feminist perspective on adornment extends beyond the recognition of women's roles in ornamental practices and examines how jewellery becomes a mediator for intersectional identities. Taking inspiration from Kimberlé Crenshaw's intersectionality theory and Karen Barad's posthumanist feminism, this approach analyses how jewellery navigates the intersections of gender, class, ethnicity, age, and ecological positioning.

For instance, a Khasi woman's coral beads have a multipurpose role as an indicator of her gender identity, family's economic status, ethnic affiliation, age-group, as well as her community's relationship with the marine ecology. These plural symbolisms not only function as separate layers, but also as an intertwined phenomenon that Barad refers to as “intra-action”, where the meaning is derived from relational rather than essential properties.



This intersectional interpretation discloses the way in which Adornography operates as an "embodied writing" where the social positioning is literally written onto the body through ornamental selection, organisation and exhibition. This theoretical framework brings forth a new perspective, wherein such embodied writing becomes an important signifier of cultural literacy that functions through material and not linguistic codes. The ecological aspect also comes into play when environmental factors, such as resources' accessibility, exposure to environmental toxins and involvement in conservation practices, become evident through the ornamental choices of the communities.

7. Assessing the Impacts of Sustainability in Himalayan Eco-Friendly Ornamentation

These jewellery items narrate stories of their origin, their development, their processes during their development, and the bond they share with the wearers. Wearing eco-friendly jewellery is an extraordinary experience in itself, and it can be argued that through wearing such jewellery, the wearer wears the stories of conservation and sustainability on the body. It is crucial to note that wearing eco-friendly jewellery results in positive outcomes as it tells a story of love and respect for the environment. Jewellery cannot be separated from our lives and thus may play an instrumental role in how we, as wearers, can make a difference. The wearing of eco-friendly jewellery should be seen as a positive act of preserving the environment on the part of the wearer, and leaves three types of impacts on the wearer: Psychological impacts, Social impacts, and Physical impacts.

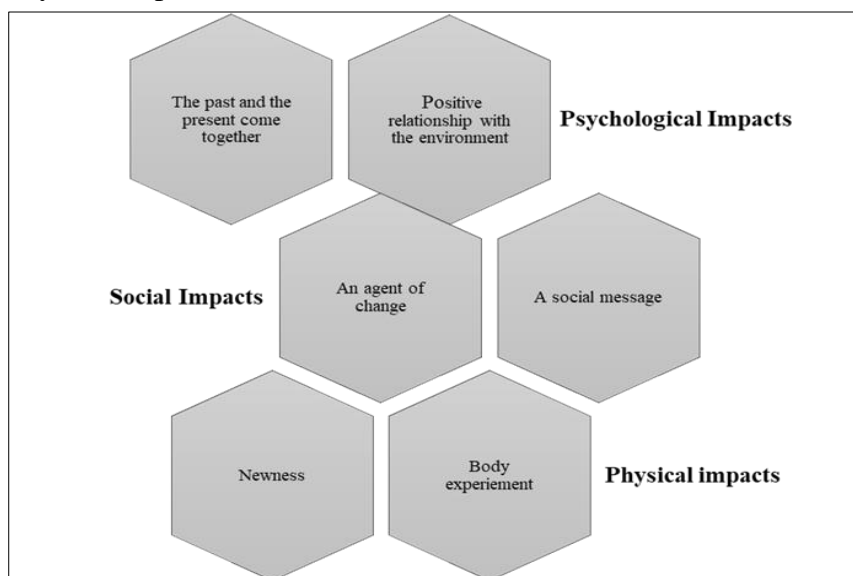


Figure 2: Impacts of Wearing Eco-friendly Jewellery

7.1 Psychological Impacts:

Positive Relationship with the Environment- Upcycling is a process that can be defined as the creative reuse of discarded materials. By wearing upcycled and recycled jewellery items categorised under environmentally friendly jewellery, the wearer might be able to establish a positive and healthy relationship with the environment. Several campaigns are currently going on in the world that urge people to minimise plastic use and opt for environmentally friendly items such as paper bags instead of plastic ones. The wearer will feel good about doing a good deed in the case of wearing jewellery that does not negatively impact the environment. Ethical jewellery causes no damage to the environment, and when one buys it, one ought to feel confident about the purchase, which has no negative impact. Jewellery is generally made from precious stones and



metals, but the wearer must try to understand how and where it is precisely made. Diamond mines cause severe threats to natural habitats and surrounding communities, where the workers are mostly underpaid, risking their lives for their livelihood. Hence, choosing sustainable and eco-friendly jewellery is an informed decision; in a way, it is the wearer doing their bit for the planet and its people.

The Past and the Present Come Together- Owing to modern developments and technological advancements, we are unable to connect with our glorious past, which celebrates the environment. The history of jewellery goes back to when early humans found jewellery in everything and anything they found around themselves in nature. By wearing eco-friendly jewellery, the wearer may appreciate the past and learn valuable lessons from it. Gajra, for instance, is a hair ornament made of fresh flowers, which women can still be found wearing. This hair ornament brings the past and the present together by combining ancient values that evoke love for flowers and the present's inclination towards flowers.

7.2 Social Impacts:

An Agent of Change- At a time when countless environmental issues prevail in society, people are aware of our planet's environmental crisis and have consciously switched to eco-friendly products. Naman Gupta's initiative at Code Effort of converting cigarette butts into usable items, including jewellery, is a great way to bring positive changes into society for the sake of the environment. Jewellery is a part of everyday existence, and like other items, it too can be employed as an agent of change. The pertinent question here is- If it can happen with paper bags, why not with jewellery?

- **A Social Message-** The wearers can bring a positive change and, in turn, influence others to choose environmentally friendly jewellery. The others may do the same, and this chain of change is bound to result in positive outcomes. For example, X wearer buys eco-friendly jewellery and influences Y wearer to follow the pattern. Next, the Z wearer takes inspiration from the Y wearer and passes on the message to the A wearer. Further, A takes it on to B, and this chain continues.

7.3 Physical Impacts:

Newness/Novelty- Apart from being ethical and environmentally friendly, the jewellery created with recycled and usable materials looks appealing, and the wearer may feel good about wearing it. The simplest explanation is that this jewellery has a newness/novelty to offer because such jewellery items cannot be found anywhere else. By wearing unique jewellery like this, the wearer may emerge as a storyteller and speak to the observers. Thus, the wearer may experience a positive change in how they perceive the body.

Body Experiment: The distinct and new types of materials may also instil confidence in the wearer because this is purely experimental. Not everybody wears eco-friendly jewellery because not everybody knows about it and its usefulness. Therefore, the wearing of such jewellery may help the wearer come closer not only to the environment but also to their body.

8. Semiotics and Storytelling Through Ornamentation

According to Adornography, each ornament becomes a text and each motif, a word within a larger eco-cultural sentence. These ornaments operate as wearable genealogies, signifying family lineage,



marriage ties, trade networks, and environmental realities. The Himalayan jewellery tradition reflects the semiotic richness of the region, where different communities employ unique symbolic systems to encode similar ecological knowledge. Mills states, "Their beads tell of who they are, where they have come from, and what bonds they carry into the future"(88).

From an ecological standpoint, the ornamental semiotics function through the utilisation of ornamental codes by different communities to deliver information present within the environment. For instance, seasonal Himalayan ornaments such as those composed of certain stones during monsoons, those involving particular metal combinations worn during winters, or plant-based ornaments designed specifically for harvest festivals, signify the environmental conditions of the region. Together, they build up a semiotic system that facilitates communities to synchronise with the changing environmental conditions.

8.1 Intersecting Dimensions of Adornography

By merging ecological study with cultural interpretation, Adornography moves beyond ornamentation and offers different methodological tools suitable for other forms of material culture as well. This approach can prove beneficial for other areas of study, such as architecture, textiles, etc., in the long run.

The dynamic concepts of palimpsestic materiality and ecological chronotopes, which have emerged from the framework of Adornography, aid in analysing the relationship between material culture and the changing ecological factors. In a way, these analytical tools can assist in understanding the process followed by different communities, in order to adapt to the shifting climatic, environmental, and ecological factors in the present scenario.

The relationship between different material cultures and factors like gender, class, ethnicity, and ecology also becomes visible through the intersectional lens of Adornography. This perspective further contributes to broader discussions on social and ecological justice and helps to comprehend how material cultures respond to such inequalities.

9. Key Suggestions for Sustainable Adornment

In lieu of this research, combining the multi-faceted dimensions of Adornography, Himalayan tribal jewellery tradition and eco-friendly ornamentation practices, several actionable steps can be recommended to promote sustainability, gender inclusion, and cultural preservation. Firstly, adequate training and financial resources to local artisans, especially women, should be provided to encourage the usage of sustainable resources; thus, promoting both economic stability and ecological sustainability. Secondly, collaborations between different researchers, cultural institutions, and artisans should also be encouraged to preserve traditional ornamental knowledge and support environmental stewardship. Thirdly, advanced tourism protocols such as providing fair compensation to communities and highlighting the wide array of eco-friendly Himalayan jewellery should be established to create cultural and ecological awareness amongst visitors.

Additionally, awareness campaigns advocating sustainable adornment practices and ethical jewellery purchase among buyers should be organised frequently in different schools, colleges, communities, and the media. Lastly, an implementation of the unique framework of Adornography should be encouraged across other domains like textiles and architecture, so that the sociological



and ecological preservation and innovation in different material cultures can be promoted. These recommendations will not only empower communities but also foster innovation and influence policy for the development of meaningful ecological ornamentation practices.

9.1 Innovative Initiatives for Sustainable Jewellery in the Present Context

9.1.1. Jewel.Panda

A young student who runs her jewellery business online with the name Jewel. Panda has devised the idea to recycle the scrunchies that women use daily to tie up their hair as jewellery items. Her scrunchie earrings come in different shades, colours, and wearers are fascinated because they are unique. Such earrings cannot be spotted in local markets; more importantly, they are eco-friendly since they are recycled. Usually, scrunchies don't last long and are thrown away after a short period. However, these scrunchies can be preserved for extended periods with this new form of jewellery. On being asked where she found the inspiration, she shared that scrunchies are very much a part of her daily life, and she wondered if they could be used. Currently, most of the orders she receives are for these scrunchie earrings. [iii]

9.1.2 Papermelon

Papermelon, a sustainable jewellery & décor brand, was founded by Devi Chand in 2009. The exciting jewellery that she creates is made of upcycled paper. Talking about her journey, she says:

“As a tiny little kid, I loved to make things. My favourite things to make were glittery baubles and tiny gift boxes from candy wrappers. I proudly hung them on the Christmas tree, which felt like Christmas. My parents supported my crafty adventures and ignored the mess.”

She grew up and decided to study design at NIFT and quit her job to give all her time to Papermelon. To her, every piece of colourful paper came across as a story, and she confesses to having fallen in love with working with paper, which she believes creates magic. She collects all sorts of papers, such as newspapers, magazines, calendars, gift wraps, paper bags, pamphlets, etc. Devi firmly believes that every piece of paper has a story to tell, which she at Papermelon brings to life. [iv]

This necklace is made from authentic storybooks and represents the golden period of one's life, which is childhood. Through this necklace, the wearer wears a story on one level and narrates their own story. This necklace is a reminder of childhood reads and takes one back to the old times. Each bead used in this necklace is carefully chosen and handcrafted from colourful pages of a storybook.



Picture 3: Necklace made out of a Storybook

Source: Papermelon.com

9.1.3 *Ae ri Sakhi*

Ae ri Sakhi is a unique business initiative started by a mother and daughter duo who became entrepreneurs during the COVID pandemic. They create jewellery out of recycled fabric to promote sustainable fashion and sell it on social media. Jayati, the founder of *Ae ri Sakhi*, and her mother, Hemal, live in Vadodara, and *Ae ri Sakhi* clicked as an idea to the former while she was at home. She says, “We collect scrap fabric from different sources and recycle it. Instead of plastic, we use reusable boxes for packaging”. While the pandemic brought a curse for millions of people, it proved to be a good time for Jayati and her mother to work on their ideas and convert them into sustainable jewellery items. Each piece of jewellery differs from the others and tells a story of its unique journey.

9.1.4 Code Effort

Cigarette butts are collected through several initiatives and services. Code Effort came into existence in 2018 with the efforts of Naman Gupta, who was troubled about cigarette butts lying here and there. At Code Effort, cigarette butts are recycled with the assistance of the latest technology and experience. At Code Effort, all products are made from certified recycled cigarette butts. Using this material is deliberate as Naman strongly feels that cigarette butts require immediate attention in our planet’s interest. Not only has Code Effort eradicated millions of cigarette butts from the environment in a move toward conserving our depleting environment, but it also made it possible for people from all over the country to make a valuable contribution[v]. People are encouraged to collect cigarette butts in exchange for money, which has been a motivating factor. The items, one of which is identified as jewellery, allow the wearer to speak through jewellery and announce that they feel a certain sense of responsibility towards the environment and would like to be a part of the change that Naman considers extremely important.

9.1.5 JEEViKA

Liquor was banned in Bihar from 2016 onwards, and several arrests were made in connection with the illegal liquor mafia. In a recent development, the government of Bihar has devised an employment plan for rural women in the state by encouraging them to use the seized liquor bottles.



This initiative is lauded by many because this initiative will positively impact the environment and help in waste management. Apart from that, countless women will be able to earn their bread. The rural livelihood programme *JEEViKA* will be taking up this project and helping women set up bangle manufacturing units. Each year, a considerable amount of seized alcohol is found in Bihar, and recycling will also benefit people in general.

Rural Development Minister Shrawan Kumar stated, “The scheme's objective is to generate more employment for the poor, especially women, in rural areas. JEEViKA workers are already engaged in manufacturing LED tube lights and bulbs, and they are financially self-reliant.”

10. Conclusion

Eco-friendly jewellery in India represents a powerful shift in how we think about adornment. Traditionally, jewellery has been associated with wealth, heritage, and beauty, but today, it is taking on a new role; one that emphasises sustainability, ethics, and conscious living. This shift is reflected in the creative efforts of individuals and small businesses. These initiatives show us that even the most ordinary and discarded materials can be transformed into meaningful, beautiful jewellery.

Wearing eco-friendly jewellery has a deeper impact than just appearance. Psychologically, it creates a sense of connection with the environment and encourages mindful choices. Socially, it allows wearers to become quiet ambassadors of change, influencing others to make more thoughtful decisions. And physically, these pieces offer a sense of novelty and self-expression. They are unique, handcrafted, and tell a story, not just of their materials, but also of the people who wear them.

In many ways, eco-friendly jewellery is more than just an accessory. It's a conversation, a commitment, and a celebration of both creativity and care. By choosing pieces that honour the planet, wearers also honour themselves, embracing a lifestyle that values beauty, sustainability, and meaning. As this movement continues to grow, it has the potential to reshape how we view fashion, the environment, and our place within both.

Himalayan jewellery exemplifies the eco-friendly and ecologically responsible vision perfectly. The unique lens of Adornography identifies its potential beyond the decorative aspect and views it as a marker of rich ecological knowledge, social identity, and gendered agency. By positioning Himalayan jewellery as both a physical artifact and an active agent in shaping meaning, Adornography's framework demonstrates how these ornaments embody spiritual symbolism, cultural heritage, and sustainable environmental adaptation, while also empowering women as innovators, preservers of knowledge, and stewards of environmental practices.

Extending beyond the regional context, Adornography provides a versatile, interdisciplinary model suitable for various indigenous and artisanal practices globally. Its multifaceted aspects, such as ecological chronotopes, palimpsestic materiality, and intersectional embodiment, help in comprehending the complex interaction between diverse material cultures and the changing environmental and social structures. This perspective contributes not only to the academic field but also facilitates policy-making, community-driven preservation, and sustainable tourism; thus, offering strategies to counterissues of cultural loss, environmental degradation, and social disparities.



Conclusively, Adornography recognizes Himalayan ornamentation as a repository of ecological knowledge and cultural resilience, blending beauty with responsibility. It emphasizes that jewellery not only exemplifies the human-environmental dynamics but also signifies the harmonious relationship between community, ecology, and culture. In this way, it not only safeguards traditions but also encourages a sustainable, equitable, and purposeful lifestyle for generations to come.

Endnotes

- a) [i] Indic Echos. "The History of Indian Jewellery". *Bing Video*. [The history of indian jewellery indic echoes - Bing video](#). Accessed 21 May 2022. Balakrishnan discusses the history of Indian jewellery in detail in this video.
- b) [ii] "25 ECO-FRIENDLY JEWELRY BRANDS MAKING STUNNING PIECES OUT OF RECYCLED MATERIALS." *Consciousfashion.Co*, consciousfashion.co/guides/eco-jewelry-brands. Accessed 10 Oct. 2022.
- c) [iii] Telephonic interview with the founder of Jewel.Panda (Instagram) did not want to reveal her personal details.
- d) [iv] "About." *Papermelon.Com*, papermelon.com/about/. Accessed 12 Dec. 2021.
- e) [v] *Codeefforts.Com*, www.codeefforts.com/. Accessed 2 Jul. 2022.

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