



The Art of Embossing: Repoussé/Chatrai Technique's and Process Contribution to Pakistan's Cultural and Folkloric Identity

Wajahit Ali

Assistant professor, Institute of Art and Design
Government College University, Faisalabad, Pakistan
Email: wajahitali@gcuf.edu.pk

Rohail Rahat

Lecturer in Department of Fine Arts
Baba Guru Nanak University, Nankana Sahib, Pakistan
Email: rohailrahat88@gmail.com

Sammar Anwar

(Corresponding Author)

Assistant professor, Institute of Art and Design
Government College University, Faisalabad, Pakistan
Email: sammar115@gmail.com

Rabia Shereen

Teaching Assistant, Institute of Art and Design
Government College University, Faisalabad, Pakistan
Email: rabiashereen86@gmail.com

Abstract

Repousse technique is known as *chatrai* in Pakistan, it is an ancient technique of metalworking which involves hammering from the reverse side for the creation of low relief designs. This is a traditional form of art involved artistic expression, historical significance and cultural identity which plays a vital role in Pakistani heritage. The research explores that the repousse also rooted from the Mughal era. This art reflects the cultural identity including Islamic, Hindu Buddhist and Persian folkloric symbols and elements. Repousse not only considers an artistic tradition but it is also a form of storytelling, myths and cultural

narratives. Artisans use material like brass, silver, gold, and copper into objects of beauty including embellishment in architecture, jewelry, and utensils. The article also indicates the process of this art from sketching to polishing and tools used for this practice. Moreover, the research contextualizes repousse technique with the concept of individualism focusing the unique practice of artisans. Researcher examines the tradition and modern applications in contemporary designs through qualitative research approach. Ultimately, this technique not only preserves the cultural heritage but also adapts to today's market. It represents a pride symbol of Pakistani folkloric identity in vibrant cultural history of Pakistan.

Key Words: Repousse, Cultural Heritage, Individualism, Craftsmanship, Metalworking.

Introduction

The term repoussé is often linked to metalworking and art, referring to a technique where metal is shaped or adorned by hammering from the reverse side to create a design in low relief. In Urdu, "repoussé" translates to "Chatrai," but the method is more widely recognized as *Chatrai kari* or *dhaat ki sajawat* in Pakistan.

"Repoussé" is a French word meaning "to push up or forward." Technically, "repoussé" is the adjective form of the word and "repoussage" is the noun, but because repoussé is commonly used for both in English. (Corwin, 2010, p. 9) The significance of repoussé goes beyond artistic expression; it plays a pivotal role in safeguarding the cultural heritage of Pakistan. In the face of globalization and contemporary challenges, repoussé stands as a stronghold of tradition, involving artisans and communities in passing down intangible cultural wisdom. This craft fosters a sense of identity and continuity, bridging past generations with the present through the tangible heritage of metalwork.

Having deep historical roots, repoussé art in Pakistan reflects a fusion of various influences such as Islamic, Hindu, Buddhist, and Persian elements that have shaped the region. Traditional artisans use the repoussé technique to make faces of gods and goddesses, gold and silver dresses, traditional ornaments, doors, wall decorations in temples and unique gold and silver utensils. ("Banaras metal repousse craft, Uttar Pradesh," 2021). Upon closer examination, it becomes clear that repoussé is not merely a form of art but also a storytelling device, encapsulating myths, legends, and traditional patterns that mirror the shared beliefs of the Pakistani people. Its applications range from crafting ornamental plates and trays that depict epic

narratives to making jewelry adorned with symbolic patterns drawn from local folklore. Alan commented in his article that folklore is a mirror of a culture it covers the area of special concerns also it is for the reason that analysis of collections of culture. (Alan, 1969, p. 471)

The ancient technique known as Chatrai, or repoussé holds a deep-root history that spans centuries and cultures, underscoring its importance in the realm of metalworking. This traditional form, distinguished by its metal shaping method, has been employed for intricate work in precious metals like gold and silver, as well as for crafting larger art in materials such as copper, tin, and bronze. The historical progression of Chatrai's methods and applications unveils a captivating journey through time, highlighting the creativity and artistic expression of diverse societies.

The concept of individualism

According to the concept of individualism in context of art highlights the importance of repousse expression, artistic creativity and interpretation. Individualism is deeply rooted in philosophical and cultural beliefs that place the individual at the forefront of meaning and value. Repousse in an individual style and technique in which the distinctiveness of the artist's touch is apparent in the detailed, deep, and flowing patterns of repoussé work. The art piece showcases the craftsman's abilities, tastes, and creative ideas.

Anu realo wrote in her article: Three components of individualism that the three suggested elements of individualism autonomy, mature self-responsibility, and uniqueness—can be differentiated within the cultural setting of Estonia (Anu, 2002). As the same each art work of repousse reflects the personal style of artisan. The art form of repousse whether its contemporary or traditional considers as a canvas of individualism. By measuring technical and personal creativity and expertise the artists transform the tradition in to unique self-expression and its historical in roots in contemporary and modern interpretations.

Contextualizing repousse/ Chatrai works

Progressing further back to the 3rd millennium BC in the Middle East, advancements in semi-mass production techniques marked a crucial development in *Chatrai*. These methods were devised to streamline the process and reduce the labor-intensive nature of manual work. An interesting method involved pressing sheet gold into designs carved in intaglio on various substrates like stone, bone, metal, and jet. Fine silver has been known since ancient times. It is a beautiful milky white metal that is resistant to tarnish, soft, and easy to manipulate. However, if

overworked or overheated, the surface will crack or develop an orange peel texture. (Corwin, 2010, p. 13)

By 400 BC, the Greeks began using beeswax as a filler in *Chatrai*, demonstrating a continuous quest for materials that could enhance both the durability and appearance of metal pieces.

The inception of *Chatrai* can be traced back to classical antiquity, with evidence of its utilization found in Greek bronze armor plates dating back to the 3rd century BC. This era signifies a significant period in metalworking history, where the repoussé technique was utilized to achieve detailed designs and decorations on armor, demonstrating not only its functional aspect but also its potential for artistic expression. Rahat wrote in his article *Paintings and sculptures*, when evaluated and analyzed as works of art, are extremely useful instruments for understanding a specific society. (Rahat, 2021, p. 97).

The art of repoussé flourished throughout the rich Mughal era, which spanned South Asia from the early 16th to the mid-19th century. During this period, art served as both a reflection of the empire's magnificence and its refined tastes, in addition to being a means of expression. Over the course of a 1,300-year history the Newer art of molding copper into fine architectural ornaments and full bodied sacred figures has been passed through family lineages and working apprenticeships. Presently the copper repoussé technique has continued to elude a regulated school format instead favoring individual apprenticeships in the workshops and homes of more experienced artists. (Brown. N.d). Repoussé, a technique in which metal is artfully hammered from the reverse to form projecting designs, became a characteristic of the Mughal era thanks to the emperors' love of beauty and their sponsorship of the arts. With their hammers and chisels, the Mughal artisans were not only skilled metalworkers but also poets, infusing the empire's values into each curve and twist of their creations.

The vessels, often crafted from copper or silver sheets, illustrate the versatility and enduring charm of *Chatrai*. The technique's application in producing everyday objects emphasizes its integral role in India's cultural and artistic legacy, where it is still practiced and esteemed. According to the craft of sheet metal art in India: Embossing was done on metal sheets for ancient temple doors, monarch chariots, and other gold or silver objects. With time, craftspeople started using copper and brass sheets for sheet embossing. Not many people continue to practice the trade now. Brass circular wall décor, nameplates, and other objects are produced. On request, human figures, god statues, puja objects, and trophies can also be produced.

(designmango.in/, n.d.). The Banaras metal repoussé craft received a Geographical Indication that Some documents show that more than 500 households work on producing these wonderful goods.

In Pakistan the repousse art reflects Islamic calligraphy, Mughal-inspired floral patterns, and symbols drawn from local folklore grace metal surfaces, narrating tales of a land rich in diversity and unity. Craftsmanship hubs like Lahore, Peshawar, Multan, and Karachi bustle with artisans whose hands transform metal into marvels. These craftsmen, custodians of their heritage, continue to breathe life into copper, silver, gold, and brass, crafting objects of beauty and significance. According to Syed, the brass technology brassware is not known for its craftsmanship in 1950 Nonetheless, the products' fine features, decoration, and form all have an indigenous individuality. (Ahmad, 2023, P.1084). The process of fabricating brassware differs greatly from those of other traditional crafts. From intricate jewelry to grand architectural embellishments, their creations adorn intimate and communal spaces, interweaving Pakistani culture into everyday life.

Yet, the narrative of repoussé art in Pakistan transcends mere preservation; it signifies evolution. Today's artisans bridge the chasm between tradition and modernity, infusing ancient techniques with contemporary designs.

The range of Islamic metal craft can be classified into categories based on their specific features. These features include specialized manufacturing techniques and materials which when put together, establish a unique identity of the metal craft. Thin sheets of forgeable metals, the crude shaping dies and basic manufacturing technique of hammering, results in roughly finished aesthetic that constitutes of the identity of *Chitraī* objects. Traditionally the material used in *Chitraī* are Brass and Copper which were primarily used in religious decorative applications. The *Chitraī* craft has evolved over time including more and more materials according to the requirements. With the passage of time, certain areas of utilization extinguished like the large production of domestic pottery has been reduced to almost negligible level.

The *Chitraī* manufacturing process fundamentally constitutes hammering out the different decorative elements from wax mounted flat or rounded thin sheets of various metals. The tools involved in *Chitraī* are generic. The general processing steps involved in manufacturing of *Chitari* of different shapes are also similar to a large extent. The only thing different, as we go from malleable copper and aluminum to the strong steel, is the amount of heat and force required for hammering the material of *Chitraī*. Another interesting fact about Lahori *Chitraī* is that ninety percent of the tools involved in the making of *Chitraī* object is manufactured by the craftsman

himself who assesses the dimensions of the tools with respect to the decorative details of the piece he is going to produce. The different generic types of tools will be discussed according to the steps involved in the production of *Chitrai* objects. The discussion of tools will follow the categories based on the basic operations they conduct.

There are four different types of hammers used by *Chitrai* craftsman of Lahore and each type is used for a specific function during the manufacturing process. A steel headed hammer which is to forge out fine motifs and features in the sheets of strong metals like steel. The hammer is designed to generate and concentrates large amount of forging force in small area.



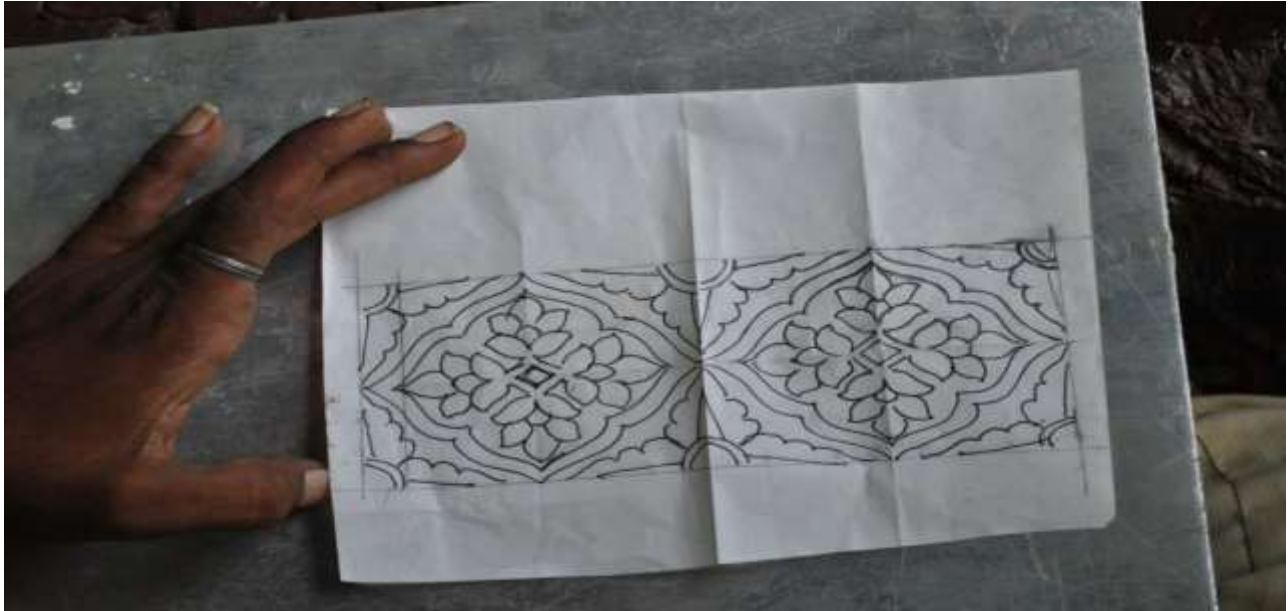
Chatrai tools, Lahore.

Research Methodology

In term of nature of this section the scholarly data were analyzed and collected in qualitative way, the research visited different places in Lahore where professionally practice this technique research observed with technique and making process and ask the practioner about this art, the researcher visited six to seven different places mostly nearby located in the market of Lahore personally to see and observe this practice on different mediums. The repousse are in Pakistan which analyzed in this article had various forms of object like lamps, wall hangings, utensils. Moreover, the collected data analyzed on the requirement of pictorial form as evidences' and written records. According to the point of view of researcher the art of repousse in Pakistan is a symbolic significance of our cultural folkloric identity presented effectively.

Process

The first step is to sketch the design and finalize it according to the requirements of the product.



Tracing on sheet. Lahore

Selection of working plate

Some metal sheets are soft and some are hard, the metal sheet is selected according to the design of the product. After selecting the metal sheet the sheets is aligned and basic working areas are marked. After marking the sheet it is cut according to the demand. According to Tettah: Metalworking techniques are the means and ways of transforming metal into a functional or purposeful item. (Tettah, 2022, p. 4)



Preparing pitch and metal sheet apply on the pitch, Lahore

Now the pitch is prepared which is locally called *Rāwal*. The *Rāwal* is prepared by heating and mixing chalk powder, *Rāwal* (Wax Powder) and Sarson ka Tail (Mastered Oil). The prepared *Rāwal* is now applied on the Ada (Working Table), it is heated and the metal plate is placed on top of the melted *Rāwal*. After the metal plate and *Rāwal* is cooled down the excess wax is removed and cleaned.



Sketch applied on sheet with glue. Lahore

Embossing or Hammering

Now the metal sheet is hammered with respect to the drawing pasted on it. First the outline is hammered and then the other details are added. The techniques that ensured the production of the indigenous metalworks were casting, forging, gold smithing and blacksmithing. Moreover, artworks that are fully dedicated to bringing to light the true identity and nature of metalworks and their philosophical values that embrace the trends and development of the jewellery and metal art industry. It also stresses the significance of chasing, repousse, and embossing, among others as fundamental techniques clearly defined in projecting jewellery and metalworks.(**Nicholas, 2022**).

Acid Bath



The process of embossing with different tools, Lahore

After completing the chasing process, the sheet is removed from the *Rāwal* by heating, the sheet is heated so the wax access wax is removed. Now the plate is dipped into Local Acids (*Qalmī shorāh* and *Gandhak Taizāb*) to remove the *Rāwal* completely and cleanses the metal plate. After dipping the plate in acid it is washed with tap water and then dipped into Cyanide to fix the natural color of the metal.



The pieces go through different levels of polishing from hard buffing to detailed polishing, Lahore

Final shape of product

Final steps include, basic framing and if the piece is functional then small things like chains or screws are added to make the piece executable.



Chatrai Lamp. Lahore

The export industry in Pakistan plays a crucial role in the nation's economy, making a significant contribution to its employment opportunities to many individuals. When it comes to repoussé art, exports involve selling metalwork items like decorative pieces, jewelry, and architectural elements to global markets.

Conclusion

The craft of repoussé in Pakistan is really a tradition that closely linked with past and present, as it has to consider with our folklore with cultural heritage. The theory of individualism distinct the technique of repousse art with all other arts. Repousse in an individual style and technique in which the distinctiveness of the artist's touch is apparent in the detailed, deep, and flowing patterns of repoussé work. The art piece showcases the craftsman's abilities, tastes, and creative ideas. It is the proud symbol of Pakistani culture also showcase the talent and skill of Pakistani artisans. The work of this art crafted by skilled hands and it also holds the legacy of generations in past, a story of a nation and a true essence of or culture that continues inspire. This ancient technique not only preserves the tradition of Pakistan but also breath a very new life into them and ensuring the rich tradition of countries heritage both now and in the future also.

References

- Banaras metal repousse craft, Uttar Pradesh. (2021, October 11). Travel Guide of India and Hobbyist Magazine – Indigenous Food, Ancient Caves, Ancient Temples, Archaeological Sites, Historical Places, Agricultural Crops, Heritage, Culture, Art, Architecture, Gardens, Music, Dance, Crafts, Photography, Books, Advertising and more. <https://sahasa.in/2021/02/16/banaras-metal-repouse-craft-uttar-pradesh/>
- Brown, T. (n.d.). *Bent out of shape embodied knowledge in the art of copper repousse*. SIT Digital Collections. https://digitalcollections.sit.edu/isp_collection/1451/
- Corwin, N. M. (2010). *Chasing and repousse: Methods ancient and modern*. A & C Black.
- Dundes, A. (1969). Folklore as a Mirror of Culture. *Elementary English*, 46(4), 471-482.
- <https://designmango.in/>. (n.d.). Pembarti : The craft of sheet metal art. design mango. <https://designmango.in/blog/Pembarti--the-craft-of-sheet-metal-art-194>
- Rahat, R., Farah, N., & Siddique, S. Art and Social Class: An Analysis and Interpretation of Art Works in Punjabi Homes.
- Realo, A., Koido, K., Ceulemans, E., & Allik, J. (2002). Three components of individualism. *European Journal of Personality*, 16(3), 163-184.
- Syed Ahmad, S. M., Khairi, H., & Legino, R. (2023). Malay traditional metal crafts in the East Coast region of Malaysia: The sustainability of tangible culture. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 13(2). <https://doi.org/10.6007/ijarafms/v13-i2/18182>
- Tetteh, N. A., Agyei, I. K., & Fening, P. A. (2022). Exploring Ghana's Indigenous Metalworks By Using Chasing And Repousse Techniques. *Journal of Positive School Psychology*, 6(10), 3385-3411.