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## Chapter 2

# Copper Craft Product Narratives: An Understanding of the User Perceptions on Associated Narratives Used for Designing Copper Craft Products



Priyansi Kansara  and Avinash Shende

**Abstract** The narrative is a term found in philosophy, psychology, and humanities studies. Various product design studies have recently looked at narratives to enrich the design process by creating an engaging experience. The narrative is said to be a natural way of experiencing the stories and establishing the emotional connection in the evolution of humankind. Craft is one such area where we have been hearing stories from ancestors that connect with the products and the techniques of making. The copper craft of India embeds more such stories inherently, which have been expressed through the shapes and texture since the metal age till today. Symbols are part of narratives that expand to references, and networks of meanings emerge by involving human interactions with the artifacts. Thus, it explicitly uses the existing categories of narrative in design and decoded associative narratives of copper craft products to develop contemporary forms in copper craft under copper craft research through design (Cu Rtd) methodology. The perception constitutes the characteristic attribution to adjectives associated with the form of the product. This paper aims to apply Osgood's semantic differential scales to investigate the aesthetic association with the narratives used for designing copper craft products by using a bipolar adjective scale. The results of this study suggest that designers can create a product personality that consumers can associate with aesthetics, experience, and emotion. Future research can explicitly investigate the experiential and emotional association of the designed copper craft fruit bowl. Thus, this study ignites future investigation into whether festive character will always be associated with the product in copper craft?

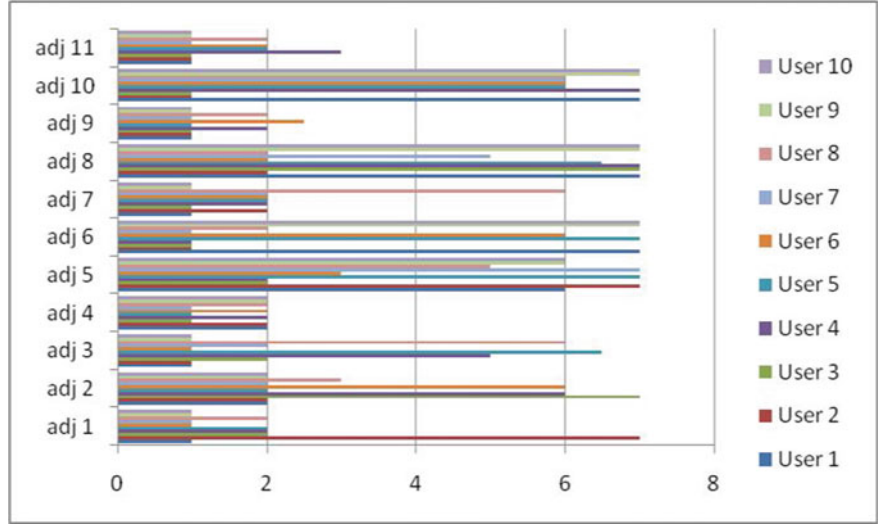
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or association of a significant event, place, time, or person, which is explained in the framework of narratives in design by Grimaldi et al. [11].

Over exposing the intended utility of the designed product, 60% of users were amazed to imagine the concept of copper craft fruit bowl, which again associates with the framework of narrative in design by Grimaldi et al. [11] where the designer visualizes the interaction between user and product which evokes user experience over time. Further organically moving with bipolar adjective scale (Table 2.3) of the aesthetic form to contemplate the associative narrative of the user–product interaction, it analyzed that the 70% of users can associate with the in- tended aesthetic form adjective of feminine, flamboyant, graceful, harmonious, and delightful (Figs. 2.5 and 2.6). Research communicates that the designed product could connect the user to the intended narrative definition—D3 (Table 2.1) in design. However, on the other hand, the purpose of the designed product was for everyday use where 80% of users tried to perceive it as creating a statement on their guest’s mind, marking it as an identity, or celebrating the product for festive use. They state that there is uniqueness in the play of the material and texture, which is indirectly associated with the tradition, forcing the mind to see the designed copper craft fruit bowl as more festive. The user narrates an enhancement of festive perception due to the uplifting character of the designed fruit copper craft plate from the usual perception of a fruit bowl close to the ground. The comparative semantical differential chart shows a very slight difference or no difference in the perception of male and female users.



**Fig. 2.6** Bar chart of comparative analysis of user aesthetic form association of the designed copper craft fruit bowl

## 2.5 Conclusion

The analysis first draws the attention which uses the methodology of Cu RfD and Cu RtD (Fig. 2.2); it can communicate the intended narrative used during the design process of the copper craft fruit bowl to the users. Further, analysis was conducted based on bipolar adjectives associated with the overall aesthetic association with the form and the details of the product designed as the elements of the story. Aesthetic association of the overall form starts by triggering the sensorial perception between the user and the product. The semantical differential chart shown in Fig. 2.5 reveals meaningful information as follows.

1. The user's interaction with the designed copper craft product elicits emotion and generates new narratives. Indirectly and inherently, the perception of the user is adding a new level of association, i.e., the festive character to the designed copper craft product by emphasizing more the material and texture connecting to the emotion of celebration and statement.
2. The perception is shifting the intended narrative in design; i.e., D3 to D4 (Table 2.1) is an emotion-evoking or value-laden representation of one or more characters in a series of chronological events connected by causality or agency (Table 2.1).

The study results suggest that designers can create a copper craft product personality that consumers can associate with aesthetics association, experience, and emotion. Further study can investigate the experiential and emotional association of the copper craft fruit bowl design. This study ignites future investigation into whether festive character will always be associated with the product in copper craft?

## References

1. Pike, A.W.G., Hoffmann, D.L., García-Diez, M., Pettitt, P.B., Alcolea, J., De Balbín, R., González-Sainz, C., de las Heras, C., Lasheras, J.A., Montes, R., Zilhão, J.U.: Science Series Dating of Paleolithic Art in 11 Caves in Spain (2012)
2. Bruce, A., Beuthin, R., Shields, L., Molzahnand, A., Schick-Makaroff, K.: Narrative research evolving: evolving through narrative research. *Int. J. Qual. Methods*, Sage (2016)
3. Bruner, J.: Life as narrative, social research 54(1); Reflections on the Self. (Spring, The Johns Hopkins University Press, 1987). <https://www.jstor.org/stable/40970444>
4. Steffen, D.: Meaning and Narration in Product Design, DPPI '09 Proceedings. Compiegne University of Technology, Compiegne, France (2009)
5. Zoran, A.: Hybridre Assemblage Bridging Traditional Craft and Digital Design, Program of Media Arts and Sciences, School of Architecture and Planning, Massachusetts Institute of Technology (2013)
6. Alonso, C.: The Narrative Of Craft: Digital Capabilities Within Traditional Stories, MediaArt and Design Glyndwr University Wrexham, UK, Internet Technologies and Applications (2015). <https://doi.org/10.1109/ITechA.2015.7317459>
7. Steffen D.: Categorizing product meaning: an investigation into the product language of clothing and fashion, Design and semantics of form and movement (2007)