doi.org/10.26398/asaproc.0079

Exploring art market trends: A Delphi study on collectible design

Laura Benedan[a], Federica Codignola[a], Carlotta Galeone[b], Paolo Mariani[a]
[a] Department of Economics, Management and Statistics (DEMS), University of Milano-Bicocca, Milan, Italy.
[b] Biostatistics & Outcome Research, Statinfo, Milan, Italy.

1. Introduction

Creative and cultural industries encompass firms that produce and exchange goods of elevated symbolic rather than material value, characterised by artistic creativity. These goods are also often characterised by uniqueness or limited reproducibility (Caves, 2000; Hirsch, 1972).

Considering anecdotal evidence based on publicly available data from the market and the media, the practice of collecting design is growing while becoming a considerable trend. Design objects belong to the aforementioned category of goods, and when they reach the typical criteria of collectibility (e.g., rarity, uniqueness, authenticity, etc.), they can be understood under a general conceptual category of *collectible design*. As these objects are traded through commercial platforms, this category can also be understood as a market category.

In particular, these objects circulate and are traded across and through typical art market platforms (auction houses, commercial galleries and their art fair stands, dealers, etc.), as well as across several commercial platforms outside the art system (flea markets, individual private exchanges, resale e-commerce websites, etc.).

Although there are no specific collectible design indexes, some art indexes include these items and show an increase in auction selling prices of collectible design items (e.g., Artprice, 2014-2024; Bonhams, 2014-2024; Cambi Aste, 2014-2024; Christie's, 2014-2024; Phillips, 2014-2024; Sotheby's, 2014-2024; etc.).

Another indicator of the rise in demand for collectible design items emerges from a general increase in the number of commercial or institutional actors (e.g., the public sector) that are specialised, based, or focused on collectible design (e.g. private galleries, auction houses and sales, fairs, e-commerce platforms, museums, special exhibitions, etc.). Moreover, an emerging body of anecdotal data from diverse media outlets indicates a rising interest in collectible design, as evidenced by an increase in references to this subject matter across a range of digital and traditional media, including social media, magazines, periodicals, and informal conversations.

Such established evidence of the growing importance of this category prompts further investigation in this trending field, especially given the lack of research on the category itself.

2. Collectible design

Wu (2013, p. 3) defined *20th-century design* as a "collection of functional and collectible objects dated between 1880 and 1980" and described *collectible objects* as assets "traded on an active and transparent resale market with a potential to realise financial gains or storage of value".

Bertacchini and Friel (2014) identified the segment of *collectible furniture design*, referencing both modern and contemporary design items that were originally conceived as functional goods and, in recent decades, have been integrated into the art domain through special collections and exhibitions in museums. The authors affirm that with the emergence of

demand by collectors, a specific market for collectible design has emerged. Hence, we recognise collectible design as a hybrid category.

While collectible design can be perceived as an independent market (Bertacchini and Friel, 2014), it also performs through the art market, in accordance with Robertson's (2005) art market categorization.

In this paper, we conceptualise collectible design as a *hybrid market category* encompassing specific *sectors* (e.g., furniture, glassware), *types* (e.g., Modern, Art Deco, Memphis), and *commodities* (e.g., the Wishbone Chair, designed by Hans Wegner in 1949 for Carl Hansen & Søn).

In this study, we also refer to collectible design as a category that includes both historical and contemporary design commodities produced in limited editions or as unique pieces, while excluding classic design (antique furniture and decorative commodities). Indeed, in accordance with the conventional art market classifications, classic design represents a distinct category, which is usually treated separately.

Although visual art consumption may be related to hedonic (Hirschman and Holbrook, 1982; Holbrook and Hirschman, 1982), aesthetic (Holbrook, 1980), and symbolic consumption (Hirschman, 1981; Hirschman, 1986; Park et al., 1986), design commodities are functional by nature. However, in this study, we argue that collectible design users (e.g., collectors), besides valuing these commodities for their functional and utilitarian benefits, may also be motivated by the need to satisfy their emotional, aesthetic, or symbolic needs connected, for instance, to self-image and social identification. In fact, collectible design mostly performs through the art market, which, owing to some of its peculiar characteristics, is perceived as extremely symbolic (Codignola, 2019; Graw, 2009; Velthuis, 2005, among others). This undoubtedly contributes to the symbolic significance of collectible design.

Consequently, by referring to collectible design as a hybrid market category of hybrid commodities existing in a hybrid space that blurs the lines between function and symbolism, this study seeks to understand whether the symbolic value of collectible design represents the main driver of attractiveness. If this is the case it would have a positive influence on economic performance and value (Codignola and Mariani, 2021; Throsby, 2008; Velthuis, 2005).

Upon this thesis is based the main objective of this study, which is to make a first attempt to define and contextualise collectible design.

3. Methodology

To make an initial attempt to define and contextualise collectible design, this study employs the Delphi method, a structured communication technique originally developed as a systematic, interactive forecasting tool that relies on a panel of experts (Dalkey and Helmer, 1963). The Delphi process involved multiple rounds of questionnaires, with feedback provided to participants between rounds to refine their responses and to move toward consensus.

To initiate the study, three in-depth qualitative interviews were conducted with experts in collectible design: two from Italy and one from France. These interviews aimed to gather in-depth insights into the current state and future direction of collectible design. Data collected from these interviews were subjected to both qualitative and quantitative analyses to extract meaningful patterns and trends.

The interviews were conducted in a structured format that allowed consistent responses across participants. Each interview was recorded to ensure its accuracy and completeness. After recording the interviews, the interviews were transcribed verbatim. As one of the interviews was conducted in French, it was translated into Italian before proceeding with the analysis, to maintain consistency in the language of analysis.

4. Data analysis process and preliminary findings

The process of analysis was structured as follows:

1) A data matrix was created from the transcribed responses of three experts. To focus on content-bearing terms, non-essential words, such as conjunctions, articles, and prepositions, were removed.

2) A lemmatisation process was applied, reducing words to their base forms or lemmas. For instance, verbs were transformed into their infinitive forms, and nouns were standardised to the masculine singular. This step was crucial for minimising redundancy and ensuring that words with the same root were treated as single entities in the analysis. The lemmatisation process resulted in a matrix comprising more than one hundred unique words (rows) across the three interviews (columns). This matrix served as the foundation for the subsequent quantitative analysis. A subset of the data matrix is illustrated in Table 1 as an illustrative example of a decreasing occurrence vocabulary.

Table 1. Example of a subset of the data matrix, frequencies, 2024

Words	Int. 1	Int. 2	Int. 3	Occurrences
original	8	3	8	19
person	5	6	7	18
interest	2	8	7	17
functional	9	0	7	16
furnishing	0	9	5	14
unique	9	2	2	13
culture	6	6	0	12
thinking	7	4	1	12
mind	2	9	1	12
value	1	10	1	12
…				

Source: data from Delphi study on collectible design

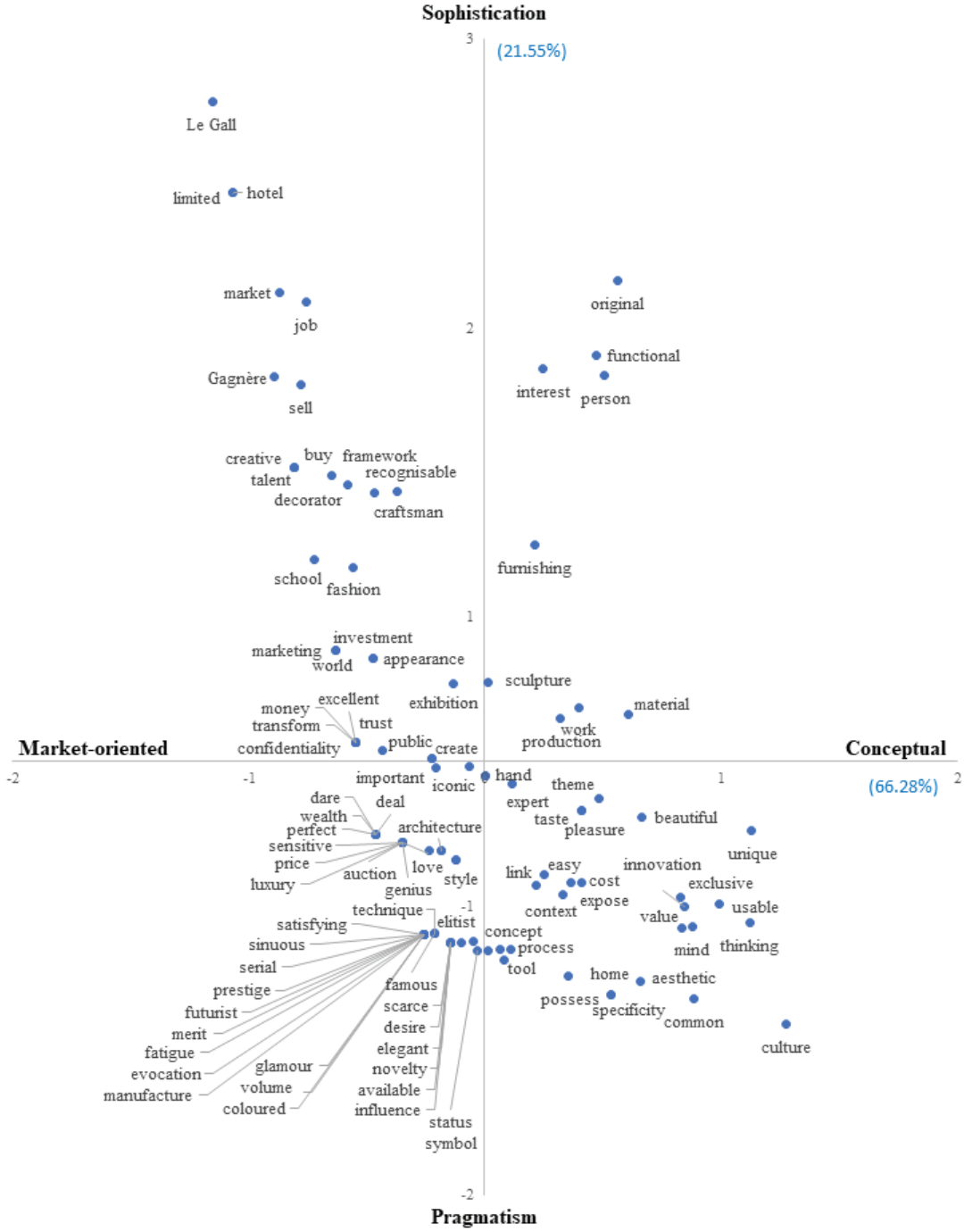
3) A principal component analysis (PCA) was conducted to identify the underlying patterns and relationships within the data, as well as to ascertain the convergence and divergence in perspectives on the topic of collectible design. This statistical method is particularly suited for the analysis of qualitative data, such as interviews, by condensing numerous variables—like words, phrases, and themes—into a smaller set of principal components that capture essential information. This technique identifies latent connections, reveals underlying structures, and enables visual representation of data, aiding in the interpretation of relationships and trends. Additionally, PCA helps focus on relevant factors while minimising noise, simplifying the analysis of complex qualitative datasets (Bolasco, 1999).

The PCA conducted on the words from the interviews revealed two primary dimensions that effectively organised the language used by the interviewees into meaningful themes. The results show that the first principal component accounts for a substantial proportion of the data's variability, explaining over 66.3% of the variance. This suggests that the first component is the most dominant factor in explaining the underlying patterns in the data.

The second principal component, which explains 21.6% of the variance, is also significant, though it represents a smaller portion in comparison to the first component. Collectively, the first two components explain 87.8% of the total variance, indicating that these two components provide a comprehensive representation of the dataset.

Figure 1 displays the first extraction of the Cartesian plane of concepts derived from the regression scores of individual words obtained through PCA of the three structured interviews. Each point represents a concept positioned according to the principal components that capture the greatest variance in responses. The plot highlights the relationships between the interview responses, showing how perspectives on collectible design converge or diverge.

Figure 1. Cartesian plane derived from PCA, regression scores, 2024



Source: elaboration from research data, Delphi study on collectible design

The left side of the horizontal axis is characterised by a focus on *market-oriented* terminology, including concepts such as “marketing”, “sell”, “buy”, “price” and “auction”. These concepts are closely associated with commercial activity, the value of transactions, and consumer behaviour, with a particular focus on tangible exchanges and measurable outcomes.

The *conceptual* terms on the right side of the spectrum, such as "unique", "thinking", "mind", and "value" prioritise abstract qualities like creativity, originality, intellectual depth, and intrinsic worth. The dichotomy reflects a tension between external, economic motivations and internal, ideational aspirations.

The vertical axis represents a continuum, with *sophistication* at the upper end and *pragmatism* at the lower end. The 'sophistication' pole is characterised by a set of attributes including "Le Gall", "limited", "original" and "recognisable". These traits emphasise exclusivity, refinement and intellectual or artistic elevation. In contrast, pragmatism is characterised by terms such as "available", "novelty", "common", "home", "manufacture" and "tool", which emphasise practical functionality, accessibility and widespread applicability. This vertical dimension reflects the contrast between elevated, niche approaches and grounded, utilitarian concerns.

5. Discussion and conclusion

The qualitative analysis of the expert interviews was instrumental in shaping and refining the Delphi questionnaire. By meticulously examining the insights and perspectives shared by these experts, we were able to identify the core themes that were central to our topic. This enabled us to design a questionnaire that effectively captured the most pertinent issues.

The early integration of qualitative methods into the Delphi process sets this approach apart. In particular, the combination of qualitative and quantitative methods, including lemmatisation and PCA, provides a nuanced understanding of the perspectives shared by experts.

This systematic approach ensured that the analysis was both rigorous and insightful, offering valuable contributions to better framing and understanding the collectible design category. Based on the insights gained from qualitative interviews, a comprehensive questionnaire was developed and administered to a panel of experts for the Delphi study.

The upcoming phases of the Delphi study will delve deeper into the factors influencing perceptions of collectible design. For instance, by refining the consensus among experts, this study offers a nuanced understanding of the key elements that allow a design item to be perceived as *collectible*.

In terms of implications for research, the findings will contribute to defining and contextualising more precisely, while facilitating a better understanding of the role of the symbolic value of these commodities in collecting patterns and users' perceptions.

With regard to the implications for stakeholders, the insights generated will serve as valuable resources for designers, collectors, and investors, enabling them to navigate and shape the evolving collectible design category. This knowledge will empower them to create and purchase items that not only resonate with current market trends but also retain their relevance and value over time.

References

Artprice. (2014-2024). www.artprice.com.

Bertacchini, E., Friel, M. (2014). Determining the value of modern and contemporary furniture design: An exploratory investigation, Department of Economics and Statistics Cognetti de Martiis. Working Papers 201437. University of Turin.

Bolasco, S. (1999). *Analisi multidimensionale dei dati. Metodi, strategie e criteri d'interpretazione*. Carocci, Roma.

Bonhams. (2014-2024). www.bonhams.com.

Cambi Aste. (2014-2024). www.cambiaste.com.

Caves, R.E. (2000). *Creative Industries: Contracts between Art and Commerce*. Harvard University Press, Cambridge, (MA).

Christie's. (2014-2024). www.christies.com.
Codignola, F. (2019). The globalization of the art market: A cross-cultural perspective where local features meet global circuits, in M. Khosrow-Pour (ed). *Brand Culture and Identity: Concepts, Methodologies, Tools, and Applications*, Information Resources Management Association (USA), IGI Global, pp. 1327-1345.
Codignola, F., Mariani, P. (2022). Investigating preferences in art collecting: The case of the François Pinault Collection. *Italian Journal of Marketing*, pp. 107-133.
Dalkey, N., Helmer, O. (1963). An experimental application of the Delphi method to the use of experts. *Management Science,* **9**(3), pp. 458-467.
Graw, I. (2009). *High Price: Art between the Market and Celebrity Culture*. Sternberg Press.
Hirsch, P. (1972). Processing fads and fashions: An organization-set analysis of cultural industry systems. *The American Journal of Sociology*, **77**, pp. 639-659.
Hirschman, E.C. (1981). Comprehending symbolic consumption: Three theoretical issues, in E.C. Hirschman and M.B. Holbrook (eds). *Symbolic Consumer Behavior*, Association for Consumer Research, New York, (NY), pp. 4-6.
Hirschman, E.C. (1986). The creation of product symbolism. *Advances in Consumer Research*, **13**, pp. 327-331.
Hirschman, E.C., Holbrook, M.B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, **46**, pp. 92-101.
Holbrook, M.B. (1980). Some preliminary notes on research into consumer aesthetics, in J.C. Olson (ed). *Advances in Consumer Research*, Association for Consumer Research, Ann Arbor, (MI).
Holbrook, M., Hirschman, E.C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings and fun. *Journal of Consumer Research*, **9**, pp. 132-140.
Park, C.W., Jaworsky, B.J., MacInnis D.J. (1986). Strategic brand concept-image management. *Journal of Marketing*, **50**, pp. 135-145.
Phillips. (2014-2024). www.phillips.com.
Throsby, D. (2008). *The Economics of Cultural Policy*. Cambridge University Press.
Robertson, I. (2005). *Understanding International Art Markets and Management*. Routledge.
Sotheby's. (2014-2024). www.sotheby's.com.
Velthuis, O. (2005). *Talking Prices: Symbolic Meanings of Prices on the Market for Contemporary Art*. Princeton University Press, Princeton, (NJ).
Wu, L.T.J. (2013). *Financial Returns and Price Determinants in the 20th Century Design Market: Evidence from Sotheby's New York, 2007-2013 & 1966-2013*. Master's degree in art business Thesis, Sotheby's Institute of Art.