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# Hybrid renaissance in industrial design

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#### Introduction

Design is inherently a hybrid discipline, merging various sciences to create its artistic and scientific foundation while connecting with numerous other fields. It draws inspiration from art and aesthetics, natural sciences such as physics and engineering, and the humanities, which include language, psychology, and sociology. These scientific principles inform the development of industrial products, striving to achieve a balance between artistic and scientific elements. Both art and science contribute crucially to the formation of a product, resulting in a nature that reflects this equilibrium between opposing forces.

The tools of mixed media in design evolve based on our objectives for discovery or influence. As a result, design—rooted in the principles of mixture, evolution, and change—produces ideas that transcend traditional boundaries of concept, style, and era. This approach generates comprehensive outcomes that overlap and integrate diverse concepts and propositions, leading to designs that move beyond conventional ideas and offer contemporary solutions.

In industrial product design, the dimensions of style, concept, function, and form diverge based on the product's characteristics and the underlying idea it expresses.

For instance, style signifies the specific approach employed in the product's design; when multiple styles are integrated, the resulting design is considered hybrid. Similarly, the use of varied ideas, techniques, or materials results in a hybrid design that distinguishes it from other products.

To empower industrial designers in creating distinctive and innovative products, it is essential to understand the factors that facilitate hybrid designs, as well as to identify the characteristics and specifications required for their effective development. Thus, the research question can be articulated as follows: What is the role of hybridity in industrial products? The focus of this research is to investigate the rise of hybridity in industrial product design.

Keywords: Renaissance, Hybridity, Industrial

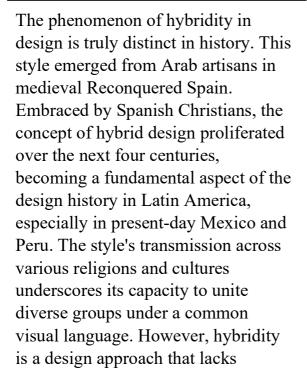
### 1-1 The Rise of Hybridity in Design

The concept of hybrid art was first formally identified as a distinct style in 1888 by the Spanish art historian Pedro de Madrazo. He recognized it as a widespread phenomenon beyond the work of individual artists or craftsmen. Madrazo asserted that hybrid art held significance akin to that of the Baroque or Rococo styles. However, evidence of stylistic independence was often lacking in many examples. A notable challenge of architectural styles in Western Europe, which were primarily

to the assertion of hybridity as an autonomous style is its tendency to coexist with other styles within the same structure. For instance, one can observe Baroque buildings with hybrid ceilings and Renaissance structures embellished with Islamic geometric patterns. Thus, hybridity may not represent a separate style in itself but rather indicates specific design elements that can exist alongside the architecture of a given era. Spanish art historian Gonzalo M. Borrás Gualis notes that hybridity "has always existed on the margins reserved for cathedrals," as illustrated in the following figures:



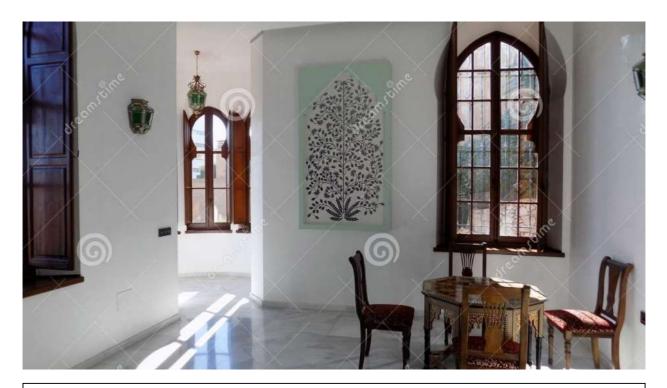
https://theculturetrip.com/europe/spain/articles/mudejar-art-hybrid-design-where-east-meets-west/





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internal cohesion and a definitive theoretical framework, leading some to argue that it may not qualify as a true "style." Art and design historians often refer to "fragments" and "memories" of hybrids, focusing on elements like geometric wooden ceilings or decorative patterns rather than complete structures or comprehensive building programs. Thus, the question arises: how did hybridity attain such popularity in Reconquered Spain that it ultimately influenced the colonies of the New World?



https://www.dreamstime.com/interior-decoration-mudejar-style-palacio-los-navajas-andalusia-spain-interior-decoration-los-navajas-style-mudejar-torreamolinos-image104201503

In this context, art and design often transcend ideologies, flowing more freely across physical and political borders. The theory of multiculturalism provides a framework for understanding how a design style such as hybridity can emerge from cultural clashes and ultimately transition into an entirely different context. In 1947, the Cuban scholar and theorist Fernando Ortiz introduced the concept of multiculturalism, challenging the prevailing theory of acculturation at

that time. He proposed that cultures intermingle to create something entirely new.

Hybridity first surfaced in medieval Spain shortly after the Christian Reconquest. This process, however, was frequently marked by violence, resulting from intense conflict and persecution, where one culture typically suppressed the other. Despite this, the contributions from both communities coexist within the final product, whether it be

technological, artistic, or agricultural. Hybridity arises from the interplay of two distinct cultures: the adoption of Arabic design and decoration by Spanish Christians, followed by the transmission of these forms to the New World through the efforts of local laborers.

In Toledo, King Alfonso VI's charter of 1085 aimed to ensure the presence of Muslims in the city following its conquest, guaranteeing their rights to retain property and worship openly in their mosques. However, it is essential to recognize that these rights and religious freedoms were granted only after the perceived Islamic threat had lessened. Art historian David Raizman notes that hybrid art "did not emerge at the moment of conquest but more than a century later, when political and economic conditions became more favorable for construction and when the integration of Islamic forms could be seen as the visual counterpart of a cosmopolitan Christian capital."

# 1-2 The Concept of Hybrid Design

The concept of hybridity in design presents a diverse array of

possibilities for generating innovative industrial product ideas. Hybridity signifies a transformation that involves the borrowing and integration of various patterns, variables, or forms to create a unique concept that distinguishes itself from the original elements. This intellectual aspect of hybridity encapsulates the broader phenomenon of cultural blending, which has become increasingly prominent in our globalized world. Additionally, the idea of hybrid cultures can deepen our understanding of the emergence of new design symmetries.

Hybridity primarily encompasses works crafted from wood and stone, which continued to exert influence on Gothic and Baroque styles during the period of Spanish rule. In Spain, the embrace of hybridity was a deliberate assertion of power by the ruling institution. Tolerance toward Muslims in the reconquered territories expanded only after power had been securely established. The following figures illustrate various types of ornaments that incorporate Islamic decorative elements.





https://www.munira.net/buy/anillo-mudejar-oro-g https://www.munira.net/buy/anillo-22-mudejar

On a different note, "biological hybridization" emerged in the mid-19th century, initially within the realm of biology and later in chemistry. In biology, hybridity refers to the process that leads to the creation of a new species through the combination of distinct genes from two different species within the same family, where the resulting strain exhibits the desired traits of both original parents.

Tomlinson defines hybridity as "the intermediate space between two areas of purity," drawing from the biological concept that differentiates between two distinct types of organisms and the pseudo-hybrid type that arises from their combination.

The researcher concludes that hybridity involves the integration of two design styles within a single framework, resulting in a hybrid design that embodies elements of both styles.

Hybridity is an artistic phenomenon wherein different art forms converge, enabling a blending process that is rich in complexity. This phenomenon influences the function of genres and is associated with transformations that generate disorder and contradiction within the visual realm. Such transformations coexist with neighboring cognitive and philosophical contradictions, which serve as foundational elements in deconstruction, relativity,

decentralization, and hermeneutics. The absence of a central point, the blurring of identity, and the dissolution of singular genres, connecting the act of creation with a variety of experiences and cultures marks this prevailing system.

The fields of science and politics significantly contribute to the advancement of design by fostering a phase of deconstruction. Various intersections and open interpretations facilitated by hybridity, as illustrated in the accompanying figures mark this process.



http://tendencee.com.br/wpcontent/uploads/2015/03/acess%C3%B3rios-modernos-cozinha-11.jpg

Hybridity is exemplified in performative styles that transcend the limitations of visible reality, resulting in unconventional and surreal forms marked by the fusion of multiple shapes into a singular entity. The goal is to create hybrid forms that intertwine painting, sculpture, and the

assembly of consumed and marginalized materials. These elements are integrated into the visual realm, transforming the surfaces where they are applied into open spaces that allow shapes to move freely. This method enables the interpretation of disparate subjects as both a narrative and an aesthetic discourse, appealing to an audience familiar with societal language or evoking a sense of wonder in viewers.

Postmodern art movements have adopted this approach, promoting free experimentation and giving rise to a hybrid style that stems from the creative imagination and innovative thinking of contemporary artists. The researcher argues that hybrid elements consist of the integration of various characteristics inherent in the design of diverse products—such as form, material, and artistic style—harmonized into a single design to yield outcomes that are both unconventional and thought-provoking.

Hybridity refers to the crossbreeding of origins and genes, as well as the blending of lineage, heredity, and strains. It signifies a process in which one dominant characteristic may overshadow others. In Arab culture, hybridity represents the mixing of heritage, the intermingling of lineages, and the fusion of traits, characteristics, and colors.



https://www.vortez.net/news\_story/tt\_esports\_claims\_two\_if\_product\_design\_awards\_for \_2016.html

Bakhtin posits that hybridity is a central feature of art. From this perspective, he can be regarded as a pioneer of a new artistic style—hybrid art, or the art of hybridity—which is distinguished by its multilingual, multi-styled, and multi-trend artworks. He defines hybridity as "the

blending of two types of art within a single work; it also encompasses the meeting of two artistic consciousnesses separated by an era, social difference, or both, within the context of that artistic work." This concept is further illustrated in the accompanying figure.



https://blog.academyart.edu/wpcontent/uploads/2019/07/industrial-design-mfa-yale-shaw-paulo.jpg

Hybridity embodies a significant advancement in modern design, capturing its renewal, uniqueness, distinction, and creativity. This is achieved by embracing a blend of intellectual and stylistic diversity across all formal, functional, and material dimensions of a design. Through hybridity, a creative designer can transcend a monotonous approach, opting instead for multidimensional creations defined by varied and hybrid compositions. This process can be likened to a symphony, where diverse musical elements unite to create a harmonious whole. employing intersecting and overlapping rhythms.

Furthermore, hybridity serves as a valuable and distinctive trait of industrial products, facilitating the integration of various shapes, styles, materials, and techniques within a single item. The concept of hybridity also implies a sense of openness; while Ferdinand de Saussure characterized language as a closed and static system, proponents of hybridity assert that systems should be receptive to other discursive frameworks, whether central within a

cultural domain or marginal attempts to challenge the mainstream. This perspective highlights that a system is not limited to its internal structures but can engage with external contexts, encompassing a wider cultural and referential landscape. In essence, a hybrid system transcends static frameworks to embrace functionality, demonstrating an awareness of and responsiveness to the surrounding local cultural reality.

the hybrid system transcends the trait of closure towards openness, historical development, and dialectical conflict. From the above, the researcher believes that hybridity is a positive and distinctive feature of industrial products, representing the combination of shapes, styles, materials, and techniques within a single industrial product.

#### **Conclusions**

In summary, hybridity refers to the integration of two design styles within a single product, resulting in a hybrid design that captures the characteristics

of both styles. The essential elements of hybridity involve the amalgamation of various specifications related to the design of different products, such as shape, material, and artistic expression. This synthesis yields an outcome that is both distinctive and unconventional.

• Thus, hybridity is a notable and advantageous feature of

industrial products, exemplifying the harmonious combination of shapes, styles, materials, and techniques within a single entity. Consequently, hybridity serves as a significant attribute of industrial design, highlighting the integration of diverse design elements into one cohesive product.

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