Eclecticism as a Philosophy to Mix Contemporary Furniture Design with Printed Upholstery Fabrics Design

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Abstract

The furniture design field is full of many different styles and trends, which are varied and developed throughout the time and the tastes change. It is necessary to search for innovative design concepts and strategies to maximize the use of these trends to create contemporary vision. Therefore, the research is interested in the eclecticism philosophy in the contemporary furniture upholstered with printed fabrics, which includes many artistic trends and mixes them together uniquely. The upholstered furniture piece is an artwork that includes consistent parts to form the final product. The printed upholstery fabric is a main element in designing the upholstered furniture, as it affects the design idea and identity. The research problem is to find a specific strategy to apply the eclectic thought in the design of furniture with printed upholstery fabrics, and reduce the separation between the furniture designer and the textile printing designer, as each of them works separately. This separation is one of the most important reasons for the insufficiency of the final design of the furniture with printed upholstery fabrics in Egypt. The eclectic furniture design process is chaotically without a clear strategy. Therefore, the research aims at improving the upholstered furniture designs through achieving cooperation between furniture designers and textile printing designers to design unconventional and unique furniture pieces. We depend on eclectic thought to select and mix among various trends in furniture design and printed upholstery fabric. Both researchers develop a strategy for designing furniture with printed upholstery fabric based on the eclectic thought to reduce the gap between furniture designer and textile printing designer. Also, this strategy was applied to create design ideas for many furniture pieces with printed upholstery fabrics depending on the eclecticism philosophy. We have stated this design strategy as rules to help furniture designers and textile printing designers to cooperate with each other, and mix furniture design with printed upholstery fabric in a consistent form away from the chaos.

Keywords

Eclecticism, Furniture design, Printed Textiles design, Design strategy, Mixing techniques.

ملخص البحث:

إن مجال تصميم الأثاث زاخر باستخدام العديد من الطرز والمدارس والاتجاهات التصميمية المختلفة والتى تختلف وتتطور مع مرور الزمن وتغيير الأذواق. فمن الضرورى البحث عن مفاهيم واستراتيجيات تصميمية مبتكرة لتعظيم الاستفادة من المخزون العريق لتلك الاتجاهات وتقديمها برؤية معاصرة. لذا يهتم البحث بدراسة فلسفة الانتقائية فى تصميم الأثاث المعاصر

ذو أقمشة التنجيد المطبوعة، و التى تجمع فى طياتها الكثير من الاتجاهات الفنية وتمزجها معا فى إطار من الحداثة والتفرد وقطعة الأثاث عمل فنى تتضافر أجزاءه معا لتكوين المنتج النهائي، وتمثل أقمشة التنجيد المطبوعة عنصرا أساسيا فى تصميم الأثاث المنجد وتؤثر فى ابراز فكرة التصميم وتؤكد هويته. وتتمثل مشكلة البحث في إيجاد استراتيجية محددة لتوظيف الفكر الانتقائي فى تصميم الأثاث ذو أقمشة التنجيد المطبوعة، وتقليل الانفصال بين مصمم الأثاث ومصمم طباعة المنسوجات، حيث أن كل منهما يعمل بمعزل عن الأخر وتأتى بعدها عملية توليف المناسب من أقمشة التنجيد المطبوعة لقطعة الأثاث. و عملية الانفصال هذة من أهم أسباب قصور الشكل النهائي لقطعة الأثاث ذو أقمشة التنجيد المطبوعة فى مصر. كما أن عملية تصميم الأثاث الانتقائي تتم بشكل عشوائي، وبدون استراتيجية محددة. لذا يهدف البحث إلى تحسين تصميمات الأثاث ذو أقمشة التنجيد المطبوعة من خلال تحقيق التعاون بين مصممي الأثاث ومصممي طباعة المنسوجات لابتكار تصميمات أثاث فريده. وتم الاعتماد على الفكر الانتقائي لاختيار ودمج العديد من الاتجاهات الفنية في مجال تصميم الأثاث وتصميم أقمشة المفروشات المطبوعة. ولذلك شاركت كلا من الباحثتين في وضع استراتيجية لتصميم الأثاث المنجد قائمة على الفكر الانتقائي؛ لتقليل الفجوة بين مصمم الأثاث ومصمم طباعة المنسوجات. كما تم تطبيق هذه الاستراتيجية لابتكار أفكار تصميميه للعديد من قطع الأثاث ذو أقمشة التنجيد المطبوعة بالاعتماد على الفلسفه الانتقائية؛ وذلك لتأصيل فلسفة الانتقائية كاستراتيجة قابلة للتطبيق، ويمكن الاعتماد عليها لتحقيق التعاون و التكامل بين مصممي الأثاث وطباعة المنسوجات ودمج تصميم الأثاث مع تصميم أقمشة المفروشات المطبوعة في هيئة متسقة بعيدا عن الفوضى.

الكلمات المفتاحية:

الفكر الانتقائي ، تصميم الأثاث ، تصميم الأقمشة المطبوعة ، استراتيجية تصميمية ، دمج التقنيات .

Introduction

The development of human sciences generally depends on the piling up of previous experiences and civilizations, as each new attitude depends on the previous one. As a reaction towards that, some designers and artists have tended to the eclectic thought; to achieve the possibility of selecting between various art styles and making harmony among them with a unique view which agrees with contemporary thinking socially and functionally. The concept of eclecticism appeared clearly in the arts at the end of the 16th century [1]. Since the 19th century, eclecticism has been revealed as a style and intellect that rejected both traditional and typicality in many fields of humanistic discipline such as literature [2], poetry, music [3], architecture [4], sculpture and interior design [5]. Eclecticism depends on selecting styles [6] ideas and theories from other various artistic origins and different generations, and merging together [7] to produce one design characterized by being contemporary and having originality.

Furniture design requires more than quantitative production. Working on a piece of furniture design differs from any other unique art design. Eclecticism is considered one of the most creative styles used in the field of furniture design, it clearly appears in mixing past and present styles together [8]. The research aims at depending on the philosophy of eclecticism to combine furniture design with printed upholstery fabrics according to a specific design strategy away from chaos and randomization. That's in addition to confirming the importance of the cooperation between the furniture designer and the printed textile designer to create consistent contemporary furniture designs based on eclectic thought.

Eclecticism is always delivered in furniture design as a part of the interior design, while the research focuses on the implementation of eclecticism in designing a piece of furniture as a self-

subsisting piece which is integrated with the printed upholstery fabric; because the value of both is determined by their relation with each other, and it's impossible to look at them separately, as the unity and the harmony between them is what determine the success of the final product. Eclecticism in designing contemporary furniture and printed upholstery fabric rejects all the familiar rules, and is considered as a self-subsisted thought characterized by freedom and as an innovation seeks to combine everything that is beautiful, exciting, and comfortable out of the existed design styles as if it's a design mixture creation from well- known styles. The creation of this mixture in a firmly connected way requires a lot of effort and stating strategy to enhance design structure of the furniture with printed upholstery fabric and produce it in a professional, well- ordered shape; so that the research also attempts putting this strategy and the possibility of confirming their ability to be applied through depending on them in designing unique pieces of furniture with different views in the light of eclectic thought.

The research problem:
The furniture sector represents an essential part of Egyptian manufacturing production. The furniture industry in Egypt is distinguished by woodworking skills (carving and carpentry skills). Damietta city represents the centre of Egyptian furniture production. It is known for carpentry skills that are handed down over generations, but when it comes to design, the furniture industry in Egypt lacks creativity in developing new consistent designs. According to the STDF survey, about 25% of Egyptian enterprises were unsatisfied with the skills of fresh graduates in the furniture design field, and about 39% showed dissatisfaction with the performance of fresh graduates in the textile designer field [9]. In addition to that, there is no clear strategy to use modern design trends in the furniture design process such as eclecticism. In the design process of the upholstered furniture, the furniture designer and printed textile designer work separately, so there is a noticeable gap between them, that's **why the research problem lies in the following questions:**
How can we reduce the gap between furniture designers and textile printing designers in the light of the eclectic thought?
How to put an applicable design strategy to help both furniture designers and printed textile designers to create unique upholstered furniture depending on the eclecticism philosophy?

The research aims:
1. Applying the eclecticism philosophy to create unique upholstered furniture designs and contribute to the furniture industry development in Egypt.
2. Creating an eclectic design strategy with specific criteria to design printed upholstered furniture.
3. Reducing the gap between the furniture designers and textile printing designers; they can cooperate and exchange their experiences to create unique furniture designs in the light of eclectic thought.

The Research Significance:
1. Shedding light on the philosophy of eclecticism and considering it in the upholstered furniture design process in order to promote the furniture industry in Egypt.

2.   Achieving the integration between furniture designer and textile printing designer as a solution for the dividedness in the industrial sectors in the Egyptian furniture industry.

The Research Methodology:
1.   **The theoretical aspect:** the researchers followed the retrospective approach in handling the philosophy of eclecticism.
2.   **The applied aspect:** the researchers followed the experimental approach by creating design ideas for printed upholstered furniture depending on the eclectic design strategy.

First: The Concept of Eclecticism:
The origin of the term eclecticism comes from a Greek word "eklektikos" which means selecting and electing the best [10]**.** It has been used in the past as a meaning of belonging to various beliefs from the different intellectual schools instead of being limited to one specific thought [11], that is depending on the main principle which is "Every intellectual school includes only a part of the truth, and to have the whole truth requires combining all different schools" [12]. This is what contributed in forming the philosophy of eclecticism during the time to include eclecticism and mixing between different models, hypotheses, and theories, so that the philosophy of eclecticism enters the entire fields of life (religion, all kinds of arts, all science branches).

Second: The Evolution and Development of Eclecticism in Design Field:
The concept of eclecticism entered art fields for the first time in 1763 clearly in the art writings of the German historian, **Johann Winckelmann** to describe the brothers Agostino and Annibable Carracci works, he mentioned, "They are eclectic men who combined in their works the knowledge of Michael Angelo, the richness of Veronese Paolo works, the strength of Domenichino performance, Guercino" [13] Winckelmann's description was taken in the beginning as a negative criticism of the brothers Carracci's works, that the eclecticism doesn't come with something new, but depends on the perfect simulation of the style. In 1764, the negative view of eclecticism started to change, and that the eclecticism artist might beat out the previous artists, and configures his chosen elements perfectly with new vision such as the German Artist Anton Mengs's works whom Winckelmann (1764) described, "The greatest artist in his time, he is capable of discovering and choosing strength point in works of the previous ones and makes profit of it in configuring his own style" (p.97). In the Eighteenth century, the English painter **Joshua Reynolds** -the chief of Royalty Academy of arts in London - considered eclecticism as a vital thought in the field of arts that depends on borrowing from previous works and connecting them to reflect the artist's unique character [14]. Since the beginning of the nineteenth century using eclecticism expanded in different fields of art generally and in design especially (architecture, interior design, carving, graphic…), as the artist's desire to be free of the traditional restrictions, mixing old with new to achieve originality and contemporaneity in their works, and coordinate between different art styles to come up with unexpected design solutions. The architect **Cèzar Daly** described eclecticism as the extraction of ancient civilization and arts ideas in a new technique) [15]. Eclecticism includes mixing elements, methods, and styles belonging to various artistic origins, or in different periods of time in design fields; to create new designs with a unique vision. The completed fusion between different

styles became the basic characteristic of the final design [16]. The designer's role comes up in revealing his identity in this fusion in a frame of unity, harmony and rhythm away from chaos and randomness), which the Italian architect Luigi **Vagnetti** described "the eclectic design requires a designer with a unique style to select and combine different styles" [17].

Some of the most extreme examples of the eclectic architecture pioneers could be seen all over the world. The Residence of Bukovinian and Dalmatian Metropolitans, designed by **Josef Hlávka** in 1882, Chernivtsi, Ukraine , which combined features of ancient Constantinople, Gothic austerity, Renaissance style , the freethinking of English Whigs, the comfort and merit factors of the spiked Vienna [18] .In America, one of the most famous eclectic architects was **Daniel H. Burnham** , he was called "Burnham of Chicago" [19], in addition to that **Richard Morris Hunt** and **Charles Follen McKim** were the backbone of eclectic architecture [20]. **Alexander Jackson Davis's** design for Lyndhurst (1864-67) villa   reflects the eclectic style through mixing American Gothic Revival design with Romantic tradition [21]. Another example of eclecticism is the church of the Sagrada Familia in Barcelona designed by **Antonio Gaudi**, where the gothic style was merged with the natural world motifs [22]. Eclecticism appeared in Asia, such as the Bank of Japan in 1895 which was designed by Kingo Tatsuno[23]. In India there are eclectic trends called Indo-Saracenic and Indo-Gothic. The Indo-Saracenic mereges the traditional architectural styles of India with the British attempts as shown in The Mysore Palace in Mysore in southern India which blends together Hindu, Muslim, Rajput, and Gothic styles of architecture [24].

Third: Problematic of the Mismatch between Furniture Design and Printed Upholstery Fabrics in Egypt:

Design is a harmonic language that isn't recognized unless all the elements of design are integrated together, so the designed vision becomes clear when the design parts are matched and in harmony. So the piece of furniture can't be looked at separately from the fabric that covers it or a part of it. In Egypt, the furniture industry is divided between many sectors, each including separate stages to produce the final product [25].

The common thing in the furniture design field in Egypt is to finish the furniture design stage then the upholstery fabric stage comes next, and the designer chooses and compares his choices of upholstery fabric and then chooses the best of them and this process could succeed or fail. Also this is how it goes in printed upholstery fabrics design where the designers create and produce the fabrics in the markets and they don't know the furniture design which the fabric will cover and whether it will fit or not. This gap between what are demanded- appropriate designs- and what are on display-the available designs- leads to a disturbance in the productive design. It could lead to the fate of the final furniture piece becoming under control of the unprofessional merchants and consumers in choosing the printed upholstery fabric.

Fourth: Furniture and printed Textile Designers ' Role in Creating a Consistent Harmonic Structures

The design work is a consistent creative entity, when producing a design idea, the designers from all majors must support efforts to confirm it. Designing a piece of furniture with printed upholstery fabric must include coordination between the furniture designer and printed textile designer. In Egypt it is noticeable that there are a lot of furniture designs that lose their aesthetic

value as a result of using upholstery fabrics with inappropriate printed designs. The negligence happens because of the mismatch between the design lines or the colour scheme or design styles used in furniture design and upholstery fabric design, although each of them has its own aesthetic value. That has led to a huge pressure on the furniture designers and printed textile designers to do a lot of trials and exchange experiences for the sake of mingling their ideas to come up with design works that have a coherent harmonic structure.

Fifth: Eclecticism between Furniture Design and Printed Upholstery Fabric Design:
The eclectic thought includes new strategies in contemporary furniture design which aim at finding various forms to reach unique and original creations. Eclecticism philosophy depends on using different design methods and various design formulations that seek to mix various art styles and movements. Recently, there are a lot of contemporary furniture designs with printed upholstery fabrics that are based on eclectic thought, it is worth saying that most of these designs depend on the designers' Perspective and they are done randomly and aren't restricted to rules or specific design strategy and the designer only depends on his/her artistic personal experience. The difficulties of this design process could lead the designer to produce degraded and unprofessional designs; this is due to the absence of an obvious design strategy to this design thought to confirm reference to every designer who desires to design through eclectic philosophy.

Sixth: Mixing Techniques between Furniture Design and Printed Textile Design in Eclecticism as One Structure:
Eclecticism thought can be applied in design through three different techniques which are mixing old with new, mixing new with old, and mixing the international design styles or various cultures [26]. So these techniques can be used in designing contemporary furniture with printed upholstery fabrics through the following: -
1. Mixing the Old (Heritage) with the New (Modern):
This can be done through combining an old fashion design piece of furniture with contemporary upholstery fabric. That also includes using new techniques of painting with unfamiliar colours in modern style which makes the piece of furniture go out of its traditional form to another form suiting modernism and keeps its original features at the same time.

2. Mixing the New (Modern) with the Old (Heritage):
This can be done through combining modern designed pieces of furniture with a modified old fashion design of printed upholstery. This modification is done according to the designer's vision to match with the modern furniture design. The heritage touch can be confirmed on the furniture by using old fashioned techniques of painting like gilding and ageing etc.

3. Mixing International Styles and Various Cultures:
It is the hardest used technique, which means combining internationally known styles and design theories like art nouveau, pop art, art deco, sustainable design, functional, Dae Stijl, parametric etc... A piece of furniture could be designed in one style and its printed upholstery fabric in another style and the used painting and materials are from another one, or mixing different design motifs from various cultures together and make each culture obvious and

consistent with the others. Some cultures are distinguished by their simple motifs and features, while others are more luxurious and sophisticated, others have a lot of details and colours, and others have specific local materials such as wood or fabrics. Each culture has its own symbols and colours that refer to its people's religion, doctrine and way of thinking.

Seventh: Design strategy of Contemporary Eclectic Furniture with Printed Upholstery Fabric:

In the recent generation the contemporary designed pieces of furniture refer to the personality of the designer, the designer style reflects on his creativity generally. Designing in the light of eclecticism requires more effort and attempts from the designer, and the ability of creation to choose design methods, making, removing and adding to recast it from the beginning in his own style according to his nature and artistic knowledge. But in the light of eclecticism must put a strategy to skip random actions which may happen, especially when trying to mix between furniture design and printed upholstery fabrics design and this strategy required to apply these following criteria:

1. The Simple Form

Both the furniture design and printed upholstery fabrics design or at least one of them must be characterized by simplicity, in order to achieve balance in the construction of the final design, either the design of a chair is simple and upholstery fabric has many details or the fabric is simple and the chair design is strong.

2. Harmony

Harmony is the core of eclectic design, it depends on using different colors, shapes and effects in the design, at the same time having harmony between each other. Although the difference between styles in furniture design and upholstery fabric, it shouldn't appear as an intruder to the furniture piece, and vice versa. The success of the design depends on a full harmony between different styles in furniture design and printed upholstery fabric design.

3. Moderation and avoiding chaos and random look

When designing furniture with printed fabric in eclecticism, it is better that one of the styles controls the design idea. It is also better not to use more than two or three styles to be able to mix them in harmony. The limited dimensional piece of furniture isn't a big designed space that accepts a lot of variants and elements at the same time. Exaggeration and insobriety must be avoided in using shapes and colours because it may lead to visual chaos. The eclecticism philosophy depends on choosing first, coordination between styles second. The philosophy doesn't contain endless design styles, but must focus on a limited number of ideas and techniques in designing furniture and upholstery. There is a thin line between eclecticism and chaos.

4. Parallel Design

Designing furniture in eclecticism basically depends on finishing design steps of a piece of furniture and printed upholstery fabrics in parallel, each step is determined by the previous one, through the continuous exchange of designers' experiences in fabrics and furniture through all

the different stages of the design process to exchange thoughts and knowledge to allow the designers to reach common points and perfect solutions for the design.

5. Variation

One of the most important strategy criteria for eclecticism is variation, it could lead to the opposite. Variation happens in every stage in the design process starting from the ideas to completing the product in the final shape. Different design styles and design schools can be combined. Variation can be done through mixing patterns, materials, colours, shapes and lines, creating new relations depending on either frequency or variety between furniture piece and upholstery fabric, which creates unordered rhythm in design as a whole and gives more sparkle to the furniture piece.

6. Authenticity of the Design

The design takes control through getting out the familiar frame aiming to attract the customer through combining different and unexpected trends of design together in one piece of furniture and printed upholstery fabric, that results in dynamism and breaks the traditional in the final design.

7. The Negative Space

It means to create empty spaces in the furniture piece to give a chance to put the printed fabric with design without having to use solid fabric, and the piece of furniture may lose the chance of mixing many styles in its design, and also giving negative spaces in upholstery fabric design especially on its background allow the elements of design to show up more and give a chance for visual balance and to move freely, therefore it is easy to receive the furniture design as a whole.

8. Unity and Connection

Realizing the design completely depends on receiving the characteristics of the relation between its pieces and according to the furniture the connection is more clearly and effective between the furniture itself and the upholstery fabric. This connection is done through frequency in lines, shapes, colours and textures, especially when it is done in continuous coordination in all parts of design between the furniture and the printed upholstery fabric.

Eight: Practical Study:

The two researchers applied designs based on eclecticism and applied the design strategy on it and that is in three different models for sitting chairs (dining chair- bar chair-resting chair), **as shown in figures (1-2-3-4-5-6). The design strategy Analysis for the three eclectic design ideas are demonstrated in tables (1-2-3).**

Eclectic technique: Mix old with new.

Furniture Type: Dining Chair.

Style origins:

Furniture design: French style Louis XVI.

Textile design**:** contemporary style.

Material:

Beech wood & 100% cotton Damask in upholstery fabric &Reactive dye printing paste.

Method and Finishing:

Deco painting on wood & Silk Screen printing with Fibre Reactive Procion MXdye. &Abrasion resistance and soil resistance finish on fabric.

Dimensions :(45W / 52 D / 90 H)

Fig. 1 The perspective and description of the first eclectic design: Classic dining chair (Louis XVI) with printed upholstery fabric (Designed by the authors).

Fig. 2 Plan, elevation and side view of the first eclectic design (scale 1:15) (Designed by the authors).

Eclectic Design Strategy criteria	Description
Simple Form	A classic chair design with simple details is chosen and parts of it are covered by contemporary detailed printed fabric.
Harmony	Although old is mixed with new in the furniture piece, the total character of the design is Consistent and coherent, because of the harmony and integration between colors and the design lines directions and its form between the furniture piece and upholstery printed fabric.
Avoiding Chaos	Two design styles are only used, shapes and colors are chosen without exaggeration to avoid chaos.
Design Parallel	The chair is chosen first and based on it the upholstery fabric which is designed as the lines directions and shape match the chair form .The color scheme is chosen and divided on the chair and the upholstery fabric harmoniously.
Variation	Variation is done through using sharp and flexible features between the fabric parts, curved lines and oval shapes in the chair itself. Also using warm colors concentrate on the black and white neutrality.
Authenticity of the design	The design entirely isn't traditional, beginning with abstract design in a contemporary style and a high colored brightness, and it's finished by an unfamiliar painting of classic furniture.
Negative Space	Negative areas in the chair body are in white near parts to upholstery to suit and complete the white spaces in the fabric's background; to allow the eyes to move flexibly between furniture piece details entirely.
Interconnected	The color frequency of white and yellow and the designed lines frequency between the furniture piece and the fabric have made a strong connection and unity in the chair design. Also relying on using soft touch whether in the materials of paintings or in the type of the upholstery fabric.

Table 1. Design strategy Analysis for the first eclectic design

Eclectic technique: Mix new with old

Furniture Type: Bar Chair.

Style origins:

Furniture design: Modern Industrial style.

Textile design: Modified classic design produced from gobelins factory in Paris from 1760 to 1767. The original piece was designed by Maurice Jacques and Louis tessier.

Material:

Stainless steel & polyester- cotton Gabardine in upholstery fabric &Pigment Printing paste.

Method and Finishing:

No further coating for legs & Silk screen printing with pigment based inks & Abrasion resistance and soil resistance finish on fabric.

Dimensions: (40W/ 40D/80 H).

Fig. 3 The perspective and description of the second eclectic design: Modern bar chair with printed upholstery fabric (Designed by the authors).
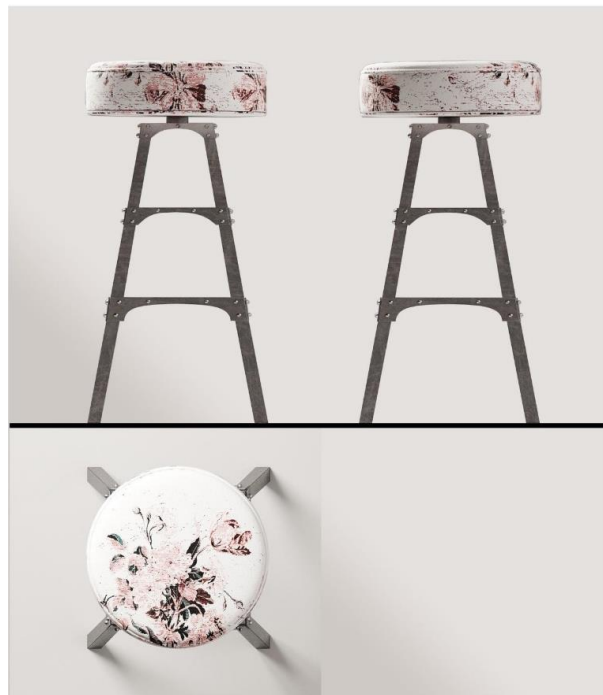

Fig. 4 Plan, elevation and side view of the second eclectic design (scale 1:15) (Designed by the authors).

Eclectic Design Strategy criteria	Description
Simple form	It is based on simple design in the chair body with appearing clasp nails to confirm the industrial style in the design, choosing a printed fabric piece with classic details.
Harmony	Harmony is done in the bar chair though the difference between the furniture piece and the fabric that's according to the color harmony, and the position of the printed design direction so it matches the circled chair-base with straight legs of the furniture piece.
Avoiding chaos	The details and the color scheme of the classic fabric design are simplified to be able to suit the industry style of furniture piece without causing visual chaos.
Design parallel	The chair was designed first then the fabrics, the colors, details and textures were decided to be combined in a way that suits the contemporary design of the chair and its position and direction were chosen to suit the bar chair-seat.
Variation	Variation is clear in using straight lines with curved ones and circled shapes, also it is shown in the difference in smooth feeling in sharp steel in the legs and pinked engravings in the upholstery.
Authenticity of the design	The unexpected mixing between the upholstery classic design and the contemporary design of the furniture, and depending on untraditional details and materials achieved unique form, which through the designers' style and selfness is shown in eclecticism and mixing.
Negative space	It is represented in little details in the chair design and maintains the negative space in the upholstery background which makes a hypothetical balance with the printed parts, allowing movement and comfort to the eyes among the furniture as a whole.
Interconnected	The connection is clear through the similarity between the chair-legs and connecting each other by spindles which add stability, and the upholstering starts from the legs' limits and continues on the chair-seat which confirms the continuity of the design and its connection. Also the color frequency of gray in the stainless steel and the upholstery has helped in that.

Table 2. Design strategy Analysis for the second eclectic design

Eclectic technique: Mix international styles

Furniture Type: Rest chair

Style origins:

Furniture design: Art deco & Bauhaus

Textile design: De stijl style

Materials:

Stainless steel& Beech wood & 100%Pure soft cotton in upholstery fabric & Reactive dye based ink.

Methods and Finishing:

Black metallic painting on Stainless steel& Ink Jet printing with reactive dye based ink& soil resistance finish on fabric.

Dimensions: (81W / 70 D / 84 H)

Fig. 5 The perspective and description of the third eclectic design: Rest chair (Art deco & Bauhaus style) with printed upholstery fabric (De stijl style).

Fig. 6 Plan, elevation and side view of the third eclectic design (scale 1:15).

Eclectic Design Strategy criteria	Description
Simple form	Three different design directions are chosen: Art deco in the upholstered part of the chair, Bauhaus (from Mies van der Rohe works) in chair-legs design, and De Stijl in upholstery fabric design. Then their design characteristics are combined in a simple shape with strong forming.
Harmony	The harmony is done despite the differences between design styles, through forming design lines, textures and colors in a full harmonious form.
Avoiding chaos	Only the main and obvious characteristics of chosen schools of art are applied without unjustified details.
Design parallel	The form of the chair is finished, then the printed fabric is decided to suit the chair-legs, then using the color pallet of designed fabric to select the color and texture of the chair legs painting.
Variation	Variation is clear in using geometrical lines and curved lines together through the difference in its thickness and directions, and using cold colors (light blue shades), warm ones (yellow) and neutrality (white and black). Besides the total variation in the whole chair, the upholstered part is characterized by streamlined and smoothness in the opposite of the sharp and saturation color in the steel legs.
Authenticity of the design	The designer's character is clear in reshaping the three different design directions in the same unique piece with dynamic form.
Negative space	The upholstered part takes up a big part of the chair so; white negative spaces are on purpose to give a chance for showing the aesthetic aspects of the chair design and upholstery fabric design alike.
Interconnected	Frequency using crossed lines in chair-legs and back upholstery fabric, also the black color frequency with gold effects and golden metal pieces at the end of the chair legs makes connection with colors (black and yellow) and texture effects that are existing in the upholstery printed fabric, which achieve the unity and rhythm in the design of the furniture piece entirely.

Table 3. Design strategy Analysis for the third eclectic design.

The research Results:

1. Designing parallel and exchanging experiences and ideas between the furniture designer and the printed textile designer is the best solution to the design gap that happens many times when designing furniture.

2. The fabric used in the printed upholstered furniture should not be an intruder to the furniture piece design but as an essential part of its design.

3. The furniture piece is limited dimensional; it doesn't accept a variety of styles. To keep away from chaos and complication while designing by eclecticism, the designers should use only two or three styles to be able to be mixed in harmony, make one of the design styles dominate the design idea, use negative spaces in textile design, and create a simple form in the furniture piece.

4. Achieving attractiveness, variation, connection and harmony in manipulating design elements like (shapes, colours, materials, textures, etc..) are basic features to design an eclectic upholstered furniture professionally.

The research Recommendations:

1. **Researchers and academics** in the field of furniture design should research the unique trends in design such as eclecticism to create untraditional designs.

2. It is necessary for **the furniture design factories and institutions** to cooperate between The furniture designer and the printed textile designer to eliminate the mismatch that happens in the upholstered furniture pieces.

3. The design techniques and strategy criteria which are revealed in this paper should be applied to create successful furniture eclectic designs, as it is shown in the three researchers' presented designs.

4. **The ministry of industry** should spread awareness between furniture makers about the importance of organization   furniture design process and industry stages together to produce the final product, it should not be divided between many sectors without any connection.

Knowledge Appendix:

Johann Winckelmann (1717-1768) was a German art historian and theorist, he studied theology at the Halle University and medicine at the University of Jena. His most famous published work was (History of the Art of Antiquity) in 1764.

Joshua Reynolds (1723- 1792) was an English portrait painter; he was influenced by many artists such as Rembrand and Paolo Veronese. He developed the "Grand Style" in painting which was based on the idealization concept.

Cèzar Daly (1811-1894) was a French publisher, architect and writer. He worked as an editor and journalist from 1839 to 1888. In 1892, he received the RIBA's Royal Gold Medal.

Luigi Vagnetti (1915-1980) was an Italian architect and theorist. He was influenced by his father Fausto Vagnett . He studied at the Higher Institute of Architecture in Rome. He worked as a university professor for his entire life.

Josef Hlávka (1831-1908) was a Czech builder, architect and politician. He was one of the most well known builders and architects of the 1860s.

Daniel Burnham (1846-1912) was an American urban designer and architect. He participated in the design of many cities such as Manila, Chicago, Baguio and Washington D.C. also, he designed several buildings like the Flatiron Building in New York City and Union Station in Washington D.C.

Richard Morris Hunt (1827-1895) was an American architect. He was considered as a leading member of the architectural profession in the nation. He participated in the design of New York City and the Metropolitan Museum of Art.

Charles Follen McKim (1847-1909) was an American architect in the nineteenth century. He worked as a member of the McKim, Mead & White partnership with Stanford White and William Rutherford Mead.

Alexander Jackson Davis (1803-1892) was an American architect, studied at the American Academy of Fine Arts. He participated in the design of Dutch Reformed Church and North Carolina State Capitol.

Antonio Gaudi (1852-1926) was a Catalan architect. He designed the unfinished Girossi newsstands, the Plaça Reial in Barcelona, and the Cooperativa Obrera Mataronense building.

Tatsuno Kingo (1854-1919) was a Japanese architect. He designed the Bank of Japan building in 1896 and the Marunouchi building of Tokyo Station in 1914. He was the dean of the Architecture Department at Tokyo Imperial University.

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