Mixing Modernism & historical luxurious styles in furniture design applying
Art Nouveau movement concept & aspects

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Abstract:
Art Nouveau style is considered a very strong movement, from late 19th century and the beginning of the 20th century that paved the way to emerge the Modern movement in all art branches including Architecture & furniture design. Art Nouveau Designing elements could be widely used to enhance plain and solid furniture pieces to create a vivid and luxurious atmosphere in the interior Design. The nature elements were the first influence in Art Nouveau Architecture and furniture Design that covered lots of decorative motives like women face, long wavy hair, flowers, sea shells, nails and spirals…etc. It is an artistic movement full of Vividness and creativity. Art Nouveau style has lots of modern aspects in its own core concept and aspects like Symbolism, Meta physics and surrealism that open a wide window to the current furniture designers for creativity without boundaries.

Introduction
1-Most of furniture Designers imitate the past artistic movements like Art Nouveau from the view of its external appearance without getting deep inside the concept or knowing the point of views of Art Nouveau Designers However knowing the deep concept of the designs will facilitate the current designers minds to wider creativity.
2-Art Nouveau furniture pieces is so luxurious, complex and expensive to be manufactured due to their curving shapes and costly veneer and metal materials, so how we can get benefit of adding value of Art Nouveau decorative elements to the new modern and current designs.
3-Natural elements using in decorating the pure, modern and plain furniture should be referred to original movement with analytical study of these natural, ornaments to avoid the superficial imitating process that weakens the whole Design.

Research Objective:
1-to know the concepts, Ideas, appearance of Art Nouveau movement in furniture Design field.
2-Art Nouveau style could be widely applied on interior spaces that need to have an almost here of the past yet in a modern way.
3- Atmosphere of Art Nouveau style and ornaments could be applied on furniture Design to enhance the Design with luxurious elements yet in a modern way.
4-To enable the current designers to know Art Nouveau secrets concepts and designing elements to help them in designing modern and contemporary furniture with the spirit and appearance of a Luxurious Art Nouveau style in a modern way

Literature Review
ART NOUVEAU Furniture
Historical Introduction
Furniture created in the art nouveau style was prominent from the late 19th century to the advent of the first world war. Unlike furniture made by the British arts and crafts movement, from which it emerged in stylistic respects, most art nouveau furniture was produced in factories by normal manufacturing techniques, which led to tensions with arts and crafts figures in England, who criticized continental art nouveau furniture for not being "honestly" constructed. It also tended to be expensive, as a fine finish, usually polished or varnished, was regarded as essential, and continental designs were usually very complex, with curving shaped that were expensive to make, it by no means entirely replaced other styles of furniture, which continued to be popular, with art nouveau styles largely restricted to an expensive “art furniture" category.
The style was named for Siegfried Bing’s maison de l’art nouveau gallery and shop in paris, which opened in 1985, and in France and Belgium furniture designers took up the style with more enthusiasm than those of most countries.

Notable Architects And Furniture Designer
Several notable designers were architects who designed furniture for specific buildings they had also designed, a way of working inherited from the arts and crafts movement; these include Charles Rennie Mackintosh, Antoni Gaudi, Hector Guimard and Victor Horta. Mackintosh’s furniture was relatively austere and geometrical, marked by elongated dimensions and right-angles. Continental designs were much more elaborate, often using curved shapes both in the basic shapes of the piece, and in applied decorative motifs. In many ways the old vocabulary and techniques of classic French 18th-century Rococo furniture were re-interpreted in a new style. Luxury veneers were used in the furniture of leading cabinetmakers Georges de Feure and others.

Alphonse Mucha produced a few designs, but was little involved with production. The Ecole de Nancy (school of nancy in france), the Wiener Werkstatte in Vienna and the Deutscher Werkbund were groupings including many designers of Art Nouveau furniture. The exposition Universelle de Paris in 1900 was an important showcase for designers, and the Prima Esposizione Internazionale d’Art Decorativa modern at Turin in 1902 heavily featured the work of furniture designer Carlo Bugatti of Milan.

**The Impact of Art Nouveau Architecture On Furniture.**

Furniture design in Art Nouveau period was closely associated with the architecture of buildings; a fine finish, usually polished or varnished, was regarded as essential, and continental designs were usually very complex, with curving shapes that were expensive to make. It also had the drawback that the owner of the home could not change the furniture or add pieces in a different style without disrupting the entire effect of the room. For this reason, when Art Nouveau architecture went out of style, the style of furniture also largely disappeared.

Louis Majorelle who trained as a painter but then concentrated on running his family’s furniture business in Nancy. Majorelle began designing in an 18th-century style until persuaded by Galle to inject a more vital naturalism into his work. His pieces are, nevertheless, rather more solid than Galle’s, partly because he favoured the use of harder, more exotic woods. The more sculptural elements in Majorelle’s pieces come in the ornamentation, which, still partly inspired by the Baroque and Rococo.

He added in gilt, copper or bronze. Majorelle equaled Galle in quality of his Marquetry, but generally his style differs in its smoother lines. Majorelle was consequently able to make a successful transition to the simpler style of the 1920s. Other cabinetmakers in Nancy worked for either Majorelle or Galle, and occasionally both.

Linear rhythms anticipating the end of his career when he took up architecture and used cast concrete for his effects. Jacques gruber produced designs for Majorelle and was also professor of decorative arts at the Ecole des Beaux-arts in Nancy. His furniture shares the same flowing forms as that of Vallin, and is removed from Galle’s rococo touches.

**Dawn and dusk** bed design by Galle embodies the inspiration from butterfly as natural element carries aesthetical values

**The Origin Of Art Nouveau Style In Furniture**

What gives coherence to this variety are the irrepresible curves and sense of idiosyncratic inventiveness. Occasionally these had to be curbed especially when designs were intended for mass production. The attention to detail and the manipulation of the materials generally meant that Art Nouveau furniture was unsuited to any mode of production other than that of the individual craftsman. As in the Arts and Crafts movement in England, the Art Nouveau designer was forced to accept the fact that his work was primarily an expensive luxury for an elite, despite whatever Morris-like Utopian ideals of art for everyone he might hold. Factory produced Art Nouveau furniture inevitably lost much of its natural vitality and was a coarsened version of the hand-worked equivalent. Art Nouveau architects might have been eager to embrace the new materials of iron and steel, but when they turned to designing furniture their style was fundamentally unsuited to modern production techniques, much of the vitality of Art Nouveau derived from various provincial Centres. In France, the decorative arts were not confined to Paris, but also flourished in the city of Nancy in Lorraine. Nancy was historically the home of the glass-making industry.
Dragonfly table designed by Emil Galle the fly carries the table that decorated by sculptured tree leaves.

The Pioneers Of Art Nouveau Furniture Designers Emil Galle (1846-1904)

The leader of the Art Nouveau revival of Nancy’s main industry was Emil Galle (1846-1904), heir to a small ceramic and glassware business. Galle travelled to England in the 1870s and had been caught up in the growing enthusiasm for the decorative arts. He also studied the oriental art collection of the Victoria and Albert Museum in London and, with his new found knowledge of Chinese and Japanese techniques, he returned to Nancy to revitalize his father’s workshop. Galle was not only an enthusiastic orientalist but also possessed a specialist's knowledge of botany and entomology, his other amateur passions. He was equipped with a very detailed first-hand knowledge of leaf, flower and insect forms, which, when combined with the decorative, abstract tendency of the Japanese, combined to form the Art Nouveau blend. A third ingredient, Rococo, was already evident in Nancy, which had many fine houses and decorations in that style.

In 1884, after some years of working in glass and ceramics. Galle started designing and producing furniture. At first his designers were somewhat ponderous thought but invariably enlivened with vivid natural details. Success came at the 1889 Paris international exhibition, where Galle was acknowledged as an innovator, creating a new style in reaction to the unimaginative revivalism of contemporary French furniture. Galle work became increasingly lighter and more ornate, natural forms were not restricted to detail; whole arms, legs and backs were carved in plant or insect forms, curving and twisting to animate the whole and seeming to defy the nature of the wood itself. Although stylized, those graceful shapes were always clearly identifiable plants of a species known to Galle. His favorites were local plants including cow-parsley, water lilies, orchids and irises though he also used exotics, such as bamboo (1).

Galle preferred soft woods, of which he had a very thorough knowledge, to facilitate the creation of his effects, which included his remarkable revival of the art of marquetry. Most of the surfaces of Galle furniture became fields for the most intricate inlays featuring plants, insects or landscapes in what could become an overloading of effects. So fine was the craftsmanship, though that Galle’s own willowy signature could be reproduced on his pieces. Galle mastery of marquetry opened the way to the expression of poetry and literary themes in his furniture. He liked to include suitable quotations and, as a mark of the fusion of arts and crafts in Art Nouveau, he gave some pieces names in the manner of paintings or music.

A console he created became les perfumes d’Autrefois (perfumes of the past) and his last master piece, the bed designed while dying of leukemia, Aube et crépuscule (Dawn and Dusk). This latter piece is evidence of Galle increasing restraint in his late style, simplifying forms and eradicating much of the over intricacy of his earlier work, as well as being a tour de force of marquetry. The dark shadows of dusk are enveloped in the drooping wings of a fantastic insect on the head board, while at the foot of the bed. The rising wings of another huge insect are depicted in lighter woods and mother-of-pearl.

Galle was the inspiration behind a couple of crafts-men, termed the Nancy school, who became a loosely formal group in 1901 with the foundation of the Alliance Provincial des Industries d’Art (1859-1926). (3)

Gustave Serrurier Bovy-Inventor Furnite.

We need A “joiner culture”. If applied artists were to paint pictures again or sweep streets, we’d have it. Adolf loos, the work of the furniture designer Gustave serrurier-bovy (1858-1910) developed as an autonomous style of its own. Its parameters were set by the sober and yet vibrant elegance of British artists. After his architectural studies at the academy of fine Arts in his home town of Liege, Serrurier –Bovy opened a shop there selling English furniture. His own work bears an English touch that developed into a caracteristic trait - a souvenir of his trip to England, on which he embarked in his enthusiasm for the writings of William Morris. The vital difference from his English idols such as Charles Francis Annesley voysey or Charles Robert Ashbee lies principally in his view of the construction of furniture. The box body gave way to a body made of members.

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The extensive, stylized ornamental figures of his models is transposed into a new context. For example, in his chairs he breaks up the box body into its structural elements and puts them together again with individual bars, the same principle applied to his interior designs. The modular system of his work and its cubist rectilinearity recall the Wiener Werkstatte or Adolf loos – but it was Serrurier-Bovy who came first. His sense of ornamental disposition and geometric order never led to a unified grid every object was developed a fresh in its function from within. Like his artistic compatriots from Belgium, he too had a predilection for iron construction, just as he got on well and collaborated with the leading established architects. later, Henry Van de Velde took over the member-system of furniture from him and made it famous as the "Van de Velde style." (2)

**Gustave Serrurier-Bovy chair, ca 1902 wood, brass mounts, enamel, ca.120cm high.**

The stylized ornamental figures of his English models were transposed by Serrurier Bovy into anew context, in which he dissolved the box body system for his chair and reconstructed them from the individual bars, the same principle was adopted in his interiors.

**Marvels In Wood – Flora And Fauna.**

Even more than the vases, Galle furniture stands out for being made entirely of elements borrowed from nature. There is nothing here that is not inspired by the immediate world, that the boundless love of the craftsman paired with the tenderness of the sensitive man, the poet and the scholar does not attest for the soil of the homeland. the woods he preferred to use came from his Lorraine homeland. He either carved them and elicited decorative motifs that became an emblem of the material or indicated the function of the furniture or he used their diverse characteristics of color for the manifold nuances of his nature-bound marquetry motifs. His table tops and the side surfaces of his commodes and cabinets display landscapes with effortlessly integrated flowers, plants, grasses, birds and butterflies "the desire to display his creations in glass appropriately prompted Galle to take up cabinetmaking and joinery.in 1884, he set up a furniture workshop, and by 1886 he already had a furniture factory operating." (1)

**Michael Thonet (1796-1871) The Famous Bentwood Chair.**

**Furniture As Architecture.**

We can find principles of architecture, for example, in the design of a chair, which is also governed by the laws of statics. Or we can put it the other way round: like a chair on its four legs, so today’s skyscraper stands on its supports. Skin and bones are as clearly distinguished. In furniture as they are in a building.

A chair, too, is built…..Does the architect design the furniture for the room or the room for the furniture? Both, room and furniture, form a unity, created on the basis of the same principles. Going beyond its mere function, furniture should stand within the room like a piece of free sculpture, but nevertheless related to its setting by the functional and intellectual task which it is intended to fulfill. Prior to the 19th century, the materials of building had been wood and brick, stone and mortar for as long as anyone could remember. Suddenly however, new building materials appeared on the scene which would bring about nothing short of a revolution in architecture: iron and glass, and later, reinforced concrete. (1) The crystal palace built in London in 1851 by Joseph Paxton(1801-56) was amongst the first outstanding examples of iron-and-glass construction. Ten years earlier, following continuous experimentation, Michael Thonet (1796-1871) had registered his first patents for bentwood furniture. In the following years he moved his workshop from Boppard on the Rhine to Vienna. Common to both the Crystal palace and bentwood furniture is their construction principle on the basis of flexible robust materials. Functionally efficient, organically conceived and in many cases folding Thonet`s chairs were a huge success the famous "coffee house chair" is still manufactured today and had already sold 50 million by 1930. The secret of its enduring success lies in its social as well as technical serviceability, its low production costs and its
competitive price. Bentwood and Vienna are synonymous: along-side Thonet, the Kohn company was also producing legendary pieces of furniture, such as Josef Hoffmann’s Fledermaus chair and furniture designed by Otto Wagner. Wagner’s chair for the Die Zeit offices makes clear the correlation between detail and overall construction a "total work of art" from both an intellectual and practical point of view. (2)

Michael Thonet

Chair no.14, 1859 Bentwood, 89cm high Die Neue Sammlung, Staatliches Museum für angewandte Kunst, Munich Functionally efficient, organically conceived and in many cases folding. Thonet’s Chairs were a huge success. This bentwood design, also known as the "Viennese coffeehouse chair" is still manufactured today and has sold about 100 million. The secret of its enduring success lies in its social as well as technical serviceability, its low production costs and its competitive price.

Henry Van de Velde.

Bureau plat writing desk and armchair, ca. 1898-99 (model dated 1896)
Bureau plat: 128x267x122 cm, Armchair: 72 cm high Sculpturedoak, bronze, copper, lamps of red copper, leather writing surface and chair upholstery. The sinuous form and playful movement of line attempt to chain the user to the desk and ensnare him in its spell. The furniture is making its own statement, as it were (Klaus Jurgen Sembach)
Henry Van de Velde Necklace, ca.1900 Gold, sapphires, emeralds, 7 cm high, ca.11 cm wide (reproduction over lifesize)

Neue Sammlung, Staatliches Museum fur angewandte Kunst, Munich " A line is a force that is active, like all elemental forces: several lines brought into contact but in conflict with each other have the same effect as several forces in conflict with each other. (Henry Van de Velde

Charles Rennie Mackintosh(1868-1928)

England was unresponsive to the Art Nouveau style in furniture, but Britain as a whole was represented by Scottish designers, and in particular the Glasgow school. In furniture, as in architecture, it was Mackintosh’s work that dominated. Mackintosh’s furniture, is intended to be seen as part of a whole interior design with secondary work often design by other members of The four, and as such has many similarities with architecture. In England, Mackintosh’s designs were regarded with suspicion for being too stylized, or aesthetic, and certainly his furniture is created more for an aesthetic effect than for either comfort or to display the natural quality of the materials. As in his architecture, Mackintosh concentrated upon extremely elegant, exaggerated verticals, particularly in the back of his chairs which could be exceptionally tall and slender. These were cut into ovals, grids or ladder backs that descended down to the floor. Curves might occur, but with Mackintosh they were primarily used to stress the rigidity of verticals. A Japanese simplicity reveals itself occasionally, as in the domino table for the Ingram Street Tea Room, where sections seem almost to be slotted together by simple joinery. Mackintosh felt uncomfortable with the natural grain of the wood and attempted to minimalize it by deep, dark staining and eventually by lacquering or ebonizing it into matt black. (1) He explored a converse neutrality by painting other pieces white to act as a suitable background for lilac and silver harmonies. On lighter furniture, Mackintosh stenciled stylized designs. (2)

Mackintosh’s influence emerged most strongly in Vienna with the artists of the Secession movement. In 1903, the Secession moved into crafts, including furniture designs with the foundation of the Wiener Werkstatte, a Viennese arts and crafts guild, headed by the architect Josef Hoffmann and the painter Koloman Moser. Wiener Werkstatte furniture has the Luxury of materials rich veneers, marquetry and gilding associated with Art Nouveau and the Secession Style (Secezionstil), but is rigid angularity is a continuation of Mackintosh’s style that places it in the concluding chapter of a discussion of Art Nouveau. Similarly elusive of categorization is the furniture of the extraordinary Italian designer, Carlo Bugatti, which was the sensation and cause celebre of the Turin Exhibition in 1902. Bugatti represents the culmination of the nineteenth-century fascination for the exotic, in his case a Moorish, Egyptian and Byzantine fantasy. (3) Almost every material was used to enhance these references in his furniture: carved and painted wood, polished brass and copper, painted vellum and rich silks. The overall effect is certainly powerful.

To some it was magnificently theatrical, to other pompous and coarse.

The ornateness, the unity of theme, and the use of broad, sweeping arcs all relate Bugatti to Art Nouveau, but there is much, too, that sets him apart from all contemporaries and places him as a pioneer of Art Deco and Hollywood glamour. Mackintosh is considered a great soure of inspiration to the youth generation of furniture designers who aim to make added value of Luxury and elegancy to their modern design more over the way of Manufacturing is easier than the other Art Nouveau furniture products like the works of Galle, Majorelle and Gaudi that considered complicated and Costy in the factories. Mackintosh designs with it vertical& horizontal lines, squared and rectangular shapes and added motives that turn the design from plain modern to a sophisticated Luxurious one. Simply Mackintosh is a school sustainable for creativity and originality through modern way. (1)
assured his exaggeration in vertical trend in designing chairs generally creating his own theme in furniture design the natural Analytical of living things in life Mackintosh was reluctant to incorporate natural wood grain into his design.

Magic of the Orient D´Aronco and the Bugattis.(1856-1940):
Raimondo D´Aronco (1857-1932) had emerged as victor in the competition for the construction, of the main pavilion for the turin. Which is nonetheless rich in individual touches derived from his encounter with the Orient. Already successful as an architect, D´Aronco took part in the national exhibition in 1891 in Palermo. Where, thanks to his enthusiasm for Ottoman art, he came to meet the Turkish Sultan, Abdul Hamid. On the strength of D´Aronco`s ambitious work, the Sultan summoned the Italian to his court. He took on numerous building commissions, and his work skillfully combined the essence of Arab architecture with components from European Art Nouveau. D´Aronco threw himself enthusiastically into the restoration work on Hagia Sophia and the repairs on the Great Bazaar .

With such commissions under his belt. Earthquake in the Bosphorus area, Which he filled with building in a neo-Oriental stile floral. In D´Aronco, this mix of cultures does not result in an exotic fairy-tale architecture but in an extravagant style that occupies a wholly individual position in architectural history.

Bugattis (1856-1940):
The ornamental fantasies of Bugatti are in no way
copies or adaptations but creations in the Art Nouveau sense of turning everything into a work of art. Of course, influences can be traced, as in the international Art Nouveau movement generally. Bugatti monumentalized objects into sculptural, architectural creations. Added to this were Turkish, Arab, and Egyptian elements that had, as befitted the times, a pragmatic background. The firm of Bugatti had business connections with architects from the Islamic world, and made furniture for among other, the Constantinople villa of the khedive’s mother (the khedive was the former viceroy of Egypt). Echoes of craft traditions led the Art Nouveau artist not just to his own national past but also to non-European models. Exquisite examples of handcrafted work from North Africa and Asia Minor such as tiles from Iznik had been familiar in Europe since 1867, thanks to the great world expositions. Indeed, neo-Egyptian fashions had been popular since Napoleon’s campaign, and experienced a revival during the construction of the Suez Canal, which was finally commissioned in November 1869. Later still, the same trend inspired Bugatti to create a series of furniture designs featuring Oriental tassels and asymmetrical minarets for bordering. Symbolism, with its predilection for an almost sultry atmosphere, went one better - we have only recall Louis Majorelle’s Nenuphars furniture.

Before Bugatti moved to Paris in 1904, he had already organized an extensive furniture production business in Milan, which gained international recognition. His chairs may strike one as fanciful, but they sold like hot cakes. Likewise the tables with ornamental bases and the outlandish screens, the favorite furniture of Art Nouveau. The furniture exhibited in Turin in 1902 was already more strongly marked by rounded, Cubist forms, though without forgoing the unusual materials and ornamentation.

Carlo Bugatti: Bench, 1900 Wood, vellum, inlays of brass and white metal, beaten brass, painted decoration, tassels, 151x246x59 cm. A completely circular doorway led into one pavilion at the Turin Exposition that was without parallel inside, an astonishing assembly of beaten metal, reposed leather, tattooed vellum and fine silver inlays exuded a strange, sensuous magic, further reinforced by the brown, gold, and silver tones of paint. The ornamental fantasies of Bugatti are in no way copies or adaptations but creations in Art Nouveau sense of turning everything into a work of art.

Antonio Gaudi: Gaudi the architect and artist was an actively political person who joined several Catalan associations and voted for an independent Catalonia. He was closely attached to his homeland, but in a far-reaching sense. Besides nature in which he found the orderliness of all things, he saw his homeland as an artistic legacy. Catalans have a natural sense of the three-dimensional that gives them an idea of things as a whole and of the relationship among things. The sea and light of Mediterranean lands generate this remarkable clarity, and that is why the things of reality never lead the Mediterranean peoples astray but teach them. The desire for wholeness, proportion and balance breathes life into Gaudi’s work. The complex architectural system he cultivated has a high position in architectural history as a one-off phenomenon.

The structuring of the building follows static and, as a result, geometric principles, whereby the total form that results from that leads, in its organic
view of the unity of nature, that is, the archaic unity of anatomy and geometry, to an expressive appearance.\(^1\)

**Gaudi philosophy in design:**

His greatest teacher was always nature "Do you want to know where I find my models?" Gaudi answered his own rhetorical question by pointing to a eucalypts, tree outside the windows of his studio" An upright tree: it carries its boughs, and these carry the twigs and the twigs carry the leaves, and every single part has grown harmonically splendidly, ever since God the artist created it, this tree needs no external assistance, all things are balanced out in themselves, all things are in balance, parabolic arches, mushroom-shaped capitals, Fragile hanging vaults without visible lateral thrust-characteristics of Gaudi’s architecture reconstruct organic growth.\(^2\) He sought the origins of his architecture in the nature of plants, animals, and minerals, yet the architecture lacks the basic features of popular construction, one has only to think of the wall benches made of rustic stone without mortar, or the shell-shaped vaulting.\(^3\)

**Antoni Gaudi Cornet:**

Dragon lizard, steps of Pare Guell. Barcelona, 1901-14 Pieces of glazed ceramics. Besides Christian symbols, Gaudi loved classical and oriental mythology. The dragon lizard in the parc guell is thus a representation of python, guardian of the subterranean waters on the steps of the Temple of Apollo in Delphi while the frequent motif of a tortoise on the base of columns is a Chinese symbol of order in chaos.

**Mythology, symbolism and functionality of the organic of Gaudi:**

Among the many impressions that contemplation of the architecture of Gaudi produces Catholicism is certainly among the most enduring, the mystically devout framework of reference appears in numerous details, both in the iconography itself and it the symbolism, the saints and fathers of the Church Sagrada familiar had given voice to their religious art by means of literature, Gaudi explained the mysteries with the help of bricks and stone, besides Christian symbolism, Gaudi loved classical and oriental mythology, thus the dragon lizard in the Parc Guell is a representation of python, guardian of the subterranean waters on the steps of the Temple of Apollo in Delphi while the tortoise on the base of the column is a Chinese symbol for order in chaos, the use of allegorical images is a point of contact with Art Nouveau artist outside Spain, as are the new understanding for observing nature and the exquisite forms nature offered, the very dynamism and functional perfection of the so-called lower forms of life served Gaudi to beautify and stabilize his structures, he translated the growth structures of plants and trees directly, to fit his own message, the colors and elegance of flowers, leaves, and fruits were also used to decorate facades and
interiors, how much more logical Gaudi was in doing this than, for example, Art Nouveau artists can be especially appreciated on his furniture designs.

Gaudi work organic form is transplanted in the original growth and not in reduction. Furniture pieces are adapted to their function with the minimal expenditure of material- osseous shapes with the tension of surrounding muscle in an organic creature.\(^1\)

Antoni Gaudi Cornet: Bench seat for the Casa Calvet, Barcelona, Calle Caspe 48, 1898-1900 Sculptured oak, 180 cm long Execution by Casas and Bardes, Barcelona

The furniture from the Casa Calvet is tailored to its functions with the minimum expenditure of material. The osseous shapes have the tension of surrounding muscle from an organic creature

Some models of famous furniture designer in Art Nouveau style.

Bruno Paul: Armchair, 1901 Oak leather, 87.5x63.5x69.5 cm made by the Verreinigte Werkstatten fur Kunst im Handwerk, Munich

Bruno Paul built items of furniture which constituted ornaments in themselves, and he rapidly became the master of the "rectilinear style" He won a prize in Paris in 1900

Richard Riemerschmid: chair for a music room, 1899 Wood, leather seat, 80.6x47.5x45 cm" for all their functionality, its precisely(these pieces of furniture) which, seen through the eye of the imagination, resemble living organic beings- a leggy foal, a fantastical bird with wings outstretched – but robbed, in their anatomical structure, of soft flesh and skin.

Bernhard Pankok: free standing closet, 1899 Walnut, spruce, and glass, 167x107x41 cm Made by the Vereinigte Werkstatten fur Kunst im Handwerk, Munich Munchner Stadtmuseum Pankok was the daydreamed and visionary of the Vereinigte Werkstatten artists, but it is precisely these qualities which lend his furniture a special magic. At the 1900 World Exposition in Paris he was awarded a gold medal for his highly original creations.
**Applied Project:**
THE Researcher present her applied project to embody the concept of how to use the Art Nouveau style to present a modern concept and aspects of a dining room design for our modern and contemporary interior spaces that suit the whole atmosphere of postmodern era that we are all still live through its thoughts and ideas.

**Dining display cabinet:**
**The main concept:**
The main concept is to reach the Luxury theme of Art Nouveau through address the nostalgia in our feeling yet the whole design is modern in its shape. We can notice the vertical and horizontal division of the dining cabinet to achene the functionalism in design through saving storage closed shelves to keep the tableware and service sets. The designer enlightened the simple closing doors of the cabinet by adding the glass door show case in the middle and enlightened by indirect led light. The master focal point in that cabined is the carving frame and its long drawer down that embodies the distinguished wooden carving of Art Nouveau with the girl figure and her way intricate and decorative hair. The colors is suit the trendy furniture design colors nowadays that are between satin golden and satin silver or bronze colors to add a value of current life spirit.
The dining table:
The dining table is fashionable in size due to its high height that suits the chair seat height and its pedestal in supporting to permit the six persons to sit freely under. The dining table is round carved by the Vinge brushed veneer that suits the function and bears the usage of putting plates without getting scratched.

The dining chair:
The dining chair is high in seating height to suit the height of the dining working top, simple design with a metal motif in the back to enrich the design the chair upholstered in leather in satin golden color suit with the color of the art nouveau frame drawer.
Art Nouveau sitting set:
Art Nouveau books case:
this book case has a functional design consists of multiple closed storage places and shelves to suit the multi pin poser function of the TV unzit and book case cabinet.
the main focal point is the Art Nouveau ornament the covered some ports of the cabinet door, they are made of carved MDF panels using CNC machine program for wood working to add value of spiral motif that was very famous in Art Nouveau style carving to the modern simple design. The plain ports are veneered in brushed Vingi veneer in bronze color yet the carving ports are lacquered in stain golden color.
The design as whole is modern, dynamic due to the vertical and horizontal division theme. The fire place screen added to the design made a sense of family tie, kindness to the whole design.
Sitting sofa and table:
A comfortable sitting sofa its middle table embody the modern approaching design when mixing with the hint of a defined style such as Art Nouveau using a famous motive like spiral line that refers la one of the national forms in life the color scheme for both upholstery and wood veneer the used in the book case grey, bronze and satin golden lacquer.
Conclusions:
1- Furniture design in the Art Nouveau period was closely associated with the architecture of the building: the architects often designed the furniture, carpets, light fixtures, doorknobs, and other decorative details.

2- The furniture was often complex and expensive: a fine finish, usually polished or varnished, was regarded as essential, and continental designs were usually very complex, with curving shapes that were expensive to make.

3- In Art Nouveau style it is not that easy to change the furniture or add pieces in a different style without disrupting the entire effect of the room. For this reason, when Art Nouveau architecture went out of style, the style of furniture also largely disappeared.

4- In France, Emile Galle and Louis Majorelle had their studios and workshops. Both designers based on their structure and ornamentation on forms taken from nature, including flowers and insects, such as the dragonfly. Galle was particularly known for his use of marquetry in relief, in the Form of landscapes or poetic themes.

5- In Belgium, the pioneer architects of the Art Nouveau movement, Victor Horta and Henry Van de Velde. Designed furniture for their houses, using vigorous curving lines and a minimum of decoration. They took their inspiration from nature and also Gothic style.

6- In Britain, the furniture of Charles Rennie Mackintosh was purely Arts and Crafts, austere and geometrical, with long straight lines and right angles and a minimum of decoration. By adding his abstract motives inspired from the human figures man and woman the finishing was black, white or purple color paints to hide the wood veneer.

7- Italian and Spanish furniture design went off in their own direction. Carlo Bugatti in Italy designed the extraordinary snail chair, wood covered with painted parchment and copper, for the Turin International exposition of 1902.

8- In Spain, Antoni Gaudi and the Modernism movement, in architecture and the furniture design works that were inspired by natural forms with touches of Catalan historic styles, simply has the leadership of Art Nouveau in Spain. The most prominent production in Architecture were Sagrada familia church and Casamila residential building in Barcelona. Also he left many organic and curved furniture especially chairs and sofas embodies his special spirit in furniture design.

Recommendations:
1- The important issue in Analytical study of the furniture works of the pioneers of Art Nouveau movement is how they created their own very characteristic images of design.

2- The concept was the direct inspiration from nature but not literal imitating, it was to create the designer own vision about the nature seen in front of him, Therefor now we can find several ornaments & motives produced in Art Nouveau movement like Mackintosh, Bugatti, Gaudi, Majorelle and Galle works. So the useful lesson of that is how we as current furniture designers can go through the same experience trying to find individual ways for each of us to create new modern & temporary designs adding our brand new creative motives and ornaments inspired from nature.

3- The more the creative sources you have, the more your furniture production will be. Exactly like the pioneers of Art Nouveau who had unlimited forms and motives from nature than
presented them in unlimited abstract forms.

4- The works of Charles Rennie Mackintosh in furniture design is the most suitable concept & lines to the existing manufacturing process due to its simplicity, its plain surface and purity in design which depend on the machines process not on skillful hands of the labors.

5- Mixing simplicity of modern with Luxurious ornaments and motives of Art Nouveau movement can make great added value to the furniture designing process yet in the current modern appearance in veneer, finishing, wood fitting and accessories.

6- Sculptured motives are the most prominent kind of ornaments in Art Nouveau movement can easily be done nowadays by –CNC– computer numerical control machine in furniture factories.

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