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Nature and New Forms

Art Nouveau at the Fin-de-siècle

This chapter presents a series of case studies through which the theme of nature is explored as a new cultural authority in a world of change. The huge variety of forms taken by the international Art Nouveau movement has been regarded as a final, decadent splurge before the disciplining spirit of Modernism. This chapter traces an underlying logic behind the energetic experimentation of the period, in which the natural world was looked to in order to provide modern design with both almost infinite flexibility of forms and, at the same time, enduring validity and authority.

Architecture and Nature

The use of the natural world as a model formed one of the most recurrent features across the huge diversity of forms of expression that make up the international phenomenon that was Art Nouveau. Art Nouveau can be characterised as a new style for a new age, that as seen to approach with the new century around 1900. It was a new style, in the sense of being a profound departure from the historically based styles of the Classical and Gothic Revival design that dominated the nineteenth century. It was also a new approach to design, in that it encompassed a new degree of integration between outward style, internal structure, intended function and materials. Nature and the natural world provided much of the thinking behind this new relationship between form and ornament. It was not the only source of inspiration for Art Nouveau. Japanese art and design were hugely influential as a culture new to European audiences and one in which divisions between fine and applied art and the relationship between form, ornament and materials were observed differently.[1] *Japonisme*, the collection of Japanese art and the integration of Japanese motifs into the practice of European artists

and designers, brought with it a new interest in the use of ornament inspired by nature. This was one aspect of what was an increasingly globalised world, with and increasingly transnational culture, following centuries of colonial exploration and exploitation. Mystical symbolism drew variously on local and world mythologies.[2] The interweaving of new and old schemes of myth and history were similarly part of the pursuit of a new/ancient foundation on which twentieth century society and culture might establish itself. However, nature was seen to offer the fresh solutions that modern designers, artists and architects needed to meet the new challenges of the modern world. Many contemporary commentators, from Baudelaire to Simmel, felt that the industrial and urban transformations over the century meant the society of the late nineteenth and coming twentieth century were fundamentally different in their culture and social relations to what had gone before.[3] In design terms, it was proposed across the emerging art and design press, that modern men and women could not be served by historical design and new building types, new objects and new materials all demanded a new language of form.[4]

The natural world was turned to as a new and timeless authority to resolve the question of competing architectural styles based on different historical periods, principally the Classical versus the Gothic.[5] Theorists from across Europe saw nature as offering a system of construction, capable of providing the conceptual foundation for new construction techniques and principles.[6] In the writings of John Ruskin (1819-1900), this took the form of a conceptual synthesis of Gothic forms and natural forms, northern climate and nature and the presence of God: 'This look of mountain brotherhood between the cathedral and the Alp.'[7] The association between Gothic architecture and the natural forms of mountains and forests was one with a long pedigree in European thought.[8] Ruskin was a key theorist of design reform, whose ideas when on to inspire many designers around 1900. His thinking was based on invoking a medieval paradigms in which design was shaped by the hand of the individual craftsman, who was in turn guided by his understanding of his craft, of nature and his simple Christian faith. The Oxford Museum of Natural History, built in Oxford in 1855-1860 by the Irish architectural partnership of Deane & Woodward, exemplifies this. Benjamin Woodward, who was the lead designer, was an ardent admirer of Ruskin's writings on architecture. The museum court at the heart of the building takes the form of a gothic nave. In place of stone, however, are columns and ribs of cast iron and a pitched roof of glass. The column capitals each take the form of

a different horticultural species and different, minutely observed species of palm and vine sprout and twine in the spandrels of the roof (see Fig. 1).[9]

Fig. 1 Benjamin Woodward, Oxford Museum (Oxford, 1860). Inner court, detail of roof. © CA.

The imagery of tall tree trunks and spanning boughs is rendered modern and transparent through the use of iron and glass. The canopy of leaves performs the educative function of signalling the purpose of the museum and synthesising that purpose - knowledge of different species - into the decorative scheme. This design was a marriage of Woodward's (1816-1861) commitment to Ruskin's principles and the character of the commission: a public building for the study and presentation of the natural sciences. Already in this building, which Ruskin himself took a close interest in, we can see his medievalism tempered by the counter impulse to design a building fit for purpose and utilising modern building technology to do so.

Ruskin's writings were, by the end of the nineteenth century, known across the world, but there were a variety of routes to the same point. The Frenchman Eugène Emmanuel Viollet-le-Duc (1814-1879) was similarly influential in the Francophone sphere. His successor at the École Gratuite de Dessin de Paris, Victor Ruprich-Robert (1820-1887), developed a keen interest in botany into an extensive scheme for the use of botanically based ornament.[10] Despite pronounced differences in agenda and approach, both

advocated engagement with the structures of plants as a foundation for architectural ornament and construction.

For the field of architecture and design, botany offered a model for conceptualising the interrelationship between structure and ornament. The seemingly endless variety of forms found in the natural world - dramatically increased by colonial botanical expeditions in the nineteenth century - suited a profession facing an unprecedented increase in new building and object types, functions and materials requiring expression. Plants were hugely diverse, but could be understood as governed by an overall logic: they looked the way they did because it suited how and where they grew based on their need for light, water, nutrients and reproduction. Compared to the plethora of historicist styles, whose variety was based on human factors and choices, botanical ornament and the model of nature offered flexibility without the randomness of the patchwork of historicist styles that had become common.

As we turn our attention to the fin-de-siècle and the movement known as Art Nouveau, the explosion of experimentation in new forms and ornament becomes a little more explicable. The decades of discussion through the nineteenth century over whether to follow Gothic or Classical principles and on the correct integration of new building technologies and materials had not reached any firm consensus. What had crystallised in the various, interwoven strands of European thought on the topic was the sense that the new century would require a wholly new style, rather than any of the styles of the past. This new style was to capture the dynamism of a new age, variously called *art nouveau, jugendstil, sezessionstil, stile liberty* and a range of other names, most often it was simply referred to by critics as the 'new' or 'modern' style. The great diversity of forms that the movement took was due to the fact that it was based on a loose collection of design principles, rather than a pattern book of sources.

Louis Sullivan, Guaranty Building, Buffalo, New York, 1895-96

One of the most famous of those principles was coined by the American architect Louis Sullivan (1856-1924): 'form follows function.' Less well known is the wider context of the quote that shifts it from an implication of technocracy to the holistic, harmonious, purpose-driven life-forms of the natural world, indeed of the whole cosmos:

> It is the pervading law of all things organic and inorganic, of all things physical and metaphysical, of all things human and all things superhuman, of all true manifestations of the head, of the heart, of the soul, that the life is recognizable in its expression, that form ever follows function. *This is the law.*[11]

Sullivan had studied with Ruprich-Roberts, who later on became the inspector-general of historical monuments such as the Notre-Dame, in Paris and had been highly influenced by him, undertaking extensive botanical drawings.[12] In high rise projects, like the Guaranty Building, Buffalo, New York (1894-96) geometric and linear patterns are overlaid by foliate details, so that walls and other surfaces appear to be bursting into leaf and bud (see Fig. 2). This burgeoning is not a chaotic collapse of architectural order overrun by nature. Rather, the foliation echoes the underlying form, curling up above window apertures and up and around the corners of each cornice. The natural logic of plants growing towards the sun mirrors the upwards thrust of the skyscraper.[13]

Sullivan's functionalism was founded on a moral and metaphysical engagement with the principle of natural laws underlying the whole of creation.[14] He considered this approach particularly apposite for America, a young nation, ready to seize the opportunities offered by this departure from academic convention and embrace the fresh lessons of nature.[15]

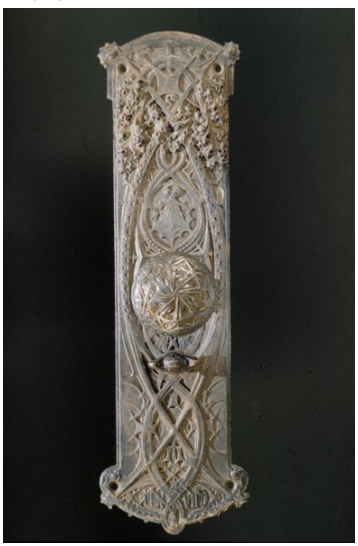

Fig 2. Louis Sullivan, Doorplate, knob, and lock for Guaranty Building, Buffalo, New York, c.1895. Cast iron. © Metropolitan Museum of Art.

> … when we know and feel that Nature is our friend, not our implacable enemy that an afternoon in the country, an hour by the sea, a full open view of one single day, through dawn, high noon, and twilight, will suggest to us so much that is rhythmical, deep, and eternal in the vast art of architecture, something so deep, so true, that all the narrow formalities, hard and fast rules, and strangling bonds of the schools cannot stifle it in us then it may be proclaimed that we are on the high road to a natural and satisfying art, an architecture that will live will be of the people, for the people, and by the people.[16]

A rejection of the tenets of historicism was, as we see in the quote above, more than just an aesthetically sound or rational decision. It opened up design to operate on a level of intuitive understanding, rather than academic knowledge and thereby had the potential to become a democratic art form.

Victor Horta, Tassel House, Brussels, 1893-96

Whereas the Guaranty Building clad its iron structure in a skin of terracotta tiles ornamented with foliate reliefs, in another example the iron itself took on the form of sprouting branches and tendrils. The Tassel House in Brussels was designed by the architect Victor Horta in 1893. It is a building marked on the exterior by the rapprochement of the old and the new: a sober classical town house in the Brussels style with elements of its iron construction emerging, unabashed, from behind the stone cladding. Iron and glass construction had, by the end of the nineteenth century, entered the domestic environment. Horta's dramatic contribution was in the interior of the building, where he employed the superior load-bearing qualities of iron to open up the interior space of the building. Even more than on the exterior, the structural presence of the iron was made visible and integrated within the decorative scheme. Horta's familiarity with iron was developed as he worked as an assistant on the construction of the glasshouses in the Royal Gardens of Laeken, built to house the exotic botanical collection of future king Leopold II of Belgium.

Art Nouveau interiors like the Tassel House, were places where the transformative power of the new principles of design reached its fullest expression. Here, the resident and their guests occupied an environment that was entirely different from both the street outside and from other interiors familiar to them from other, older houses. In these houses, patrons enacted their taste, their love of art, their wealth, their forward-looking outlook and their values. Tassel House was a very personalised project, designed to intimately reflect and serve the client. Tassel was an eminent man of science, but also closely engaged with the cultural life of Brussels. The layout of Tassel House negotiates a division between the public and private functions of the middle-class home. Utilizing an iron supporting structure enabled Horta to create a light well at the heart of the building, which housed the main artery of the staircase and a ground floor winter garden (see Fig. 3).[17]

The entrance hall introduced the visitor to a spectacular vista of unexpected openness. After passing from the building entrance through a smaller lobby, the hall offers a confusing effect of having entered a building

only to find oneself outside again. Skylights above provided overhead natural light and the tropical plants of the winter garden are echoed in the plant-like tendrils of floor mosaics, wall murals and the curling fronds of the iron-work structure that is apparent throughout the middle of the house. This provided an architecture of spectacle and enchantment for Tassel's friends and visitors. Breaking the regular segmentation of the floors by means of mezzanines and half-landings created a dynamic flow within the space. The arrangement of vestibules and main rooms would have been partially familiar to visitors, as it plays with the processional spaces common to Beaux Arts buildings. However, at the same time, the space defies expectations by means of the free-flowing plan, openness and the swirling, twisting ornament.[18] Horta succeeded in harmoniously integrating ideas from diverse sources. New technological elements and a new language of sinuous, plant-like ornament was blended with more familiar associations rooted in the Rococo town houses of Ghent, where Horta grew up, and the wider Beaux Arts tradition.[19] Though the rhetoric generated by and surrounding Art Nouveau, designers emphasized the new and a break with the past, the break was only ever partial. Elements of past architectural forms persisted, as designers strove to connect the users of their buildings to different meanings behind their designs: to the glamour of old palaces, the exoticism of unfamiliar architectural traditions or, conversely, the nationalist associations of local architectural forms or history. Art Nouveau allowed these forms to be used freely, rather than programmatically, enabling their synthesis with entirely new arrangements or materials.

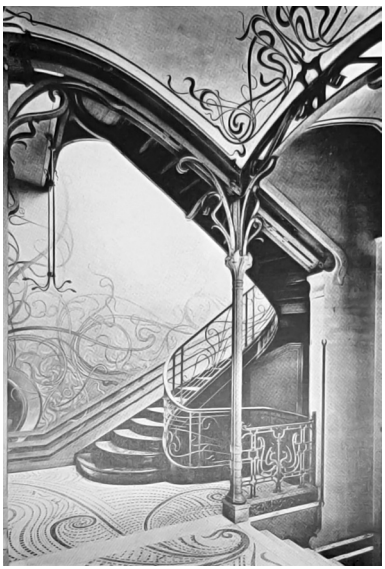

Fig 3. Victor Horta, Tassel House (Brussels 1893-96).

August Endell, Elvira Studio, Munich, 1896-7

A parallel thread can be traced, this time in Germany, in the work of August Endell (1871-1925), a philosophy student-turned-designer who became part

of the art circles in Munich which sought a break from academic conventions. He had come to Munich in 1892 in order to study mathematics and the natural sciences, though he soon switched to philosophy, psychology and aesthetics. He began his doctorate under the philosopher Theodor Lipps (1851-1914), on the principle that forms had concrete psychological effects, not just as symbols but directly operating on the human mind and emotions. In the end he left academia and never submitted his thesis.[20] Instead, he set himself up as a designer and the Elvira Studio in 1887 was the first commission he secured. His complete lack of formal training is part of what accounts for the design's astonishing departure from architectural conventions. The Elvira Studio was a portrait photography studio and residential apartment for Sophia Goudstikker and Anita Augspurg. Both were radically independent women, active in the women's rights movement in Germany. Goudstikker was the first unmarried woman in Germany to be granted a royal licence to practice as a photographer.[21] The photography studio, which they had opened together in 1887, drew clients from the stage, the nobility and the culturally circles of Munich.

Goudstikker and Augspurg were not afraid to draw attention to themselves. They wore their hair cropped short, in contravention of contemporary mores. Similarly, Endell designed a building for them that loudly proclaimed its difference from the restrained Neo-classicism of neighbouring buildings. The mid-block brick building in the smart, bourgeois heart of Munich, was smaller than its three-storey neighbours to either side, small but outrageous. Rather than using render to depict an imitation stone ashlar basement and a regular arrangement of windows above, the facade was dominated by an almost windowless expanse of smooth render sporting strange, dynamic relief forms, all picked out in bright colours. Red and yellow forms on a sea-green background.[22]

The sparsity and variety of window shapes could be attributed to the control of light needed by the practice of photography, but little about the building could be described primarily as rational or functional. The plaster ornament evoked the foaming curls of a wave in a Hokusai print, fused with the stamen and curling leaves of some hybrid plant or undersea creature. Endell's commitment to this new architectural language was total. Everything, down to the glazing bars in the windows, and encompassing all the metal-work and plaster-work throughout the building, pulsed with the same undulating rhythm. The influence of Japanese graphic art was most noticeable on the façade, in particular the dominant wave form which was reminiscent

of Hokusai's ukiyo-e print, *The Great Wave off Kanagawa*, copies of which existed in public and private collections across Europe. Inside the emphasis shifted, so that the effect was less Japonist and more that of a tiny Rococo palace that had sunk beneath the sea, so that the swags and cornices of the Rococo have been overtaken and subsumed by giant forms of coral, anemone and amoeba(Fig. 4). The Rococo has a strong tradition within Munich and is therefore another example of Art Nouveau's break with historical traditions, whilst at the same time making selective reference to the past.

The Art Nouveau represented by this design is one that wholeheartedly presented new forms and visual experiences for a new age and modern consciousness. The modernity was represented in the total departure from conventional and expected appearances, in the novelty of the encounter and experience of occupying strange spaces that had never existed before. Everything about the interior was disorienting, or re-orienting.

Fig. 4. August Endell, Elvira Studio (Munich, 1896-7).

The asymmetry and theatrical flourishes of the Rococo were extended into an interior pulsing with invented life forms. Even the banister rail that curved around the spiral staircase undulated up and down. Electric light bulbs were incorporated into the waving tendrils of the metalwork newel post and the spreading fronds of the plaster cornice ornament that stretched across the ceiling.

The organic, biomorphic energy in the vibrant colour-plates of biologist Ernst Haeckel's illustrations of undersea organisms is one prominent source. Haeckel is best known for his 1900 publication, *Kunstformen der Natur*, but he had been producing illustrated scientific work since the 1860s.[23] Nature was not imitated, but the principles of life-energy and growth were evoked. The whole can be connected to a radical and experimental psychological and visual-arts culture in Munich during the 1890s and the bold patronage of Goudstikker and Auspurg. Lipps and Endell's theories of perception revolved around the idea of empathy, psycho-emotional responses in which the self is projected out and then recognised and embraced in the encountered object.[24] Considering the photograph of the interior of Atelier Elvira, it is not difficult to project a strong response from visitors on entering this environment (see Fig. 4). The pulsating, unfurling sense of growth and change conjured by this interior environment invites a response, a response in which the individual is drawn in and absorbed by it.

This reflected not just an interest in new forms of aesthetic experience but a fundamental reframing of man's relationship to the world. Scientific discoveries, Darwin's theory of evolution, the invention of the microscope and the discovery of the building blocks of life, the cell and the atom, broke down assumptions of the uniqueness of humanity. Numerous overlapping and competing schools of thought sought to grapple with this new conceptual reality, in which man was not next to angels but made up of the same matter as everything else on the planet. This could take the form of scientific materialism that entirely stripped the numinous from the universe. In the period of Art Nouveau, however, there was a plethora of alternative paradigms that saw the shared life-world of the primal organism in mystic or at least more romantic terms. The result was a hybrid of scientific thought and ecstatic new philosophy in which the ever-burgeoning, ever dynamic world of nature offered a liberating and energising new world view.

René Jules Lalique, Lorgnette and chain, Paris, 1900

Nature was a paradigm that seemed, in its flexibility, to offer the ultimate in rational form and ornament alongside infinite variety and incomparable beauty. René Jules Lalique (1860-1945) was a designer whose jewellery designs in the late nineteenth and early twentieth centuries captured the energising effect of this new model. Lalique's work in this period produced works that encapsulate many of the key ideas associated with Art Nouveau: the seemingly impossible blend of modernity and tradition, innovation and revival, art and craft.

Additionally, Lalique's work pushed at the boundary between art and design. He had been apprenticed to a Parisian jeweller at the age of sixteen. He furthered his training in drawing at the *École nationale des arts décoratifs* in Paris and at an art school in London. His design work was based on studies from nature and he was also a keen photographer of nature.[25] His belief in the artistry of his work, or at the very least, in the commercial value of having the artistry of his work recognised, manifested in early efforts to get his work shown in that most prestigious venue, the annual *Salon* exhibition in Paris. He showed in the first *Salon* to include applied art in 1895 and exhibited his work regularly thereafter.[26]

The artistry of his draughtsmanship was one pillar on which his work rested. The other pillar was his understanding and innovation in relation to the materials and techniques used to execute the designs. Lalique greatly expanded the palette of materials found within jewellery. To gold and diamonds, standards of the goldsmith's repertoire, he added semi-precious stones of all sorts, pearls, glass and enamel. With this range of materials, the value of each piece lay more obviously in the quality of the design and manufacture, not simply in the monetary value of the gemstones.

Lalique's experimentation with forms, materials and techniques created an oeuvre of jewellery that pushed the boundaries of what had been seen before and sits at the heart of the 'new art' of Art Nouveau. His work turned its back on historical and archaeological ornament, which had provided much of the inspiration for mid-nineteenth century jewellery. Nature provided the central model for his work in the decades around 1900. As we have seen above, this focus could blend an interest in botany and natural science with more emotive, nature-based symbolism.

> He would spend long hours studying plants, flowers and trees, admiring their elegant forms, their varied colours and exquisite harmony. He was captivated and deeply moved by the constantly changing spectacle of nature, which greatly contributed to the development of his artistic temperament.[27]

Lalique cemented his reputation with show-stopping pieces worn by actresses like Sarah Bernhardt and prominent courtesans, such as Liane de Pougy. Such pieces pushed boundaries of scale and imagery. The more extreme pieces could only be worn by extreme personalities, or for particular occasions, such as the jewellery designed as part of the costume for Bernhardt's eponymous role in *Gismonda* in 1894. Others were never worn, but collected by connoisseurs, notably the Armenian oil millionaire Calouste Gulbenkian. These art objects can be regarded as a form of marketing and reputation-building.[28]

The mainstay of Lalique's business rested on the production of delicate pieces of jewellery that straddled the line between miniature art work and personal ornament. The example of the wisteria-themed lorgnette and chain in serves to exemplify the translation of closely observed natural forms into ornament (see Fig. 5). The long gold chain of the lorgnette is composed of irregularly shaped and twisted links, which imitate the twisting, vine-like branches of a climbing wisteria. The chain is punctuated by bursts of wisteria blossom, realised in diamonds, and leaves in delicate, green *plique-à-jour* transparent enamel. The chain is enamelled white around these blossoms and the traces of white enamel and gold patinate the chain in a manner similar to the silvering of wisteria bark.

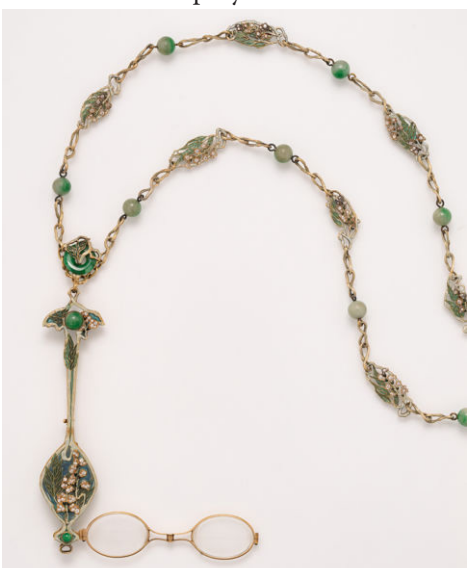

Fig. 5. René Jules Lalique, Lorgnette and chain (Paris, 1900) Gold, enamel, diamonds, jade, glass. © Metropolitan Museum of Art.

The graphic, twisting lines of the wisteria branches, in contrast to the relatively small and sparse blossoms create an aesthetic reminiscent of Japanese graphic

art, with its recurrent motif of bare branches and cherry blossom. Lalique produced cherry blossom and iris themed pieces that demonstrated this Japanese connection more directly. The choice of wisteria, a far less common motif in decorative arts, reflects the scope of Lalique's engagement with nature and the potential aesthetic forms of both common and exotic plant life.

Wisteria, native to China, Korea and Japan had become popular in garden designs in Europe and America by the late nineteenth century. The Asian associations of the wisteria are amplified in the lorgnette by the introduction of jade, which was a stone particularly associated with China and East Asia in European culture. The intent behind this association is made clear by the form of the jade disk that marks the connection between the chain and the lorgnette proper. This disk takes the shape of a Chinese jade bi, a ritual object found from the Neolithic period onwards and common enough to have made it into European and American collections in large numbers. The subtle, pale greens of the jade complement the spring greens of the translucent wisteria leaves.

This lorgnette, though it is one of Lalique's less dramatic pieces, nevertheless encapsulates an important dimension of his work and of much Art Nouveau. The exquisite luxury and technical artistry of the piece invokes the French tradition of *objet d'art* and the Parisian, fin-de-siècle context of its manufacture. At the same time, it is an object that must be understood as the product of internationally circulating materials, people, ideas and colonial trade. The lorgnette was gifted to the Metropolitan Museum of Art in New York in 1965 by Mrs. J.G. Phelps Stokes (born Lettice L. Sands). As it is marked with the Sands arms in relief on cameo glass inset on one side of the case, it was likely purchased originally by or for her mother, Eleanor Lydell Livingston Sands, or another female relative, directly from Lalique. Unlike the actresses and demimonde who bought the more outrageous pieces, the Sands were an old New York family, who proudly traced their lineage back to the American Revolution. Wealthy American visitors were a mainstay of the Parisian luxury goods and fashion industries, of which Lalique's workshop was a part.

The broad vistas of the natural world of plants and flowers that inspired Lalique was a product of eighteenth and nineteenth century European horticultural expeditions around the world. Botanists often accompanied or followed hot on the heels of colonialist expeditions. A few specimens of wisteria had reached Europe in the eighteenth and early nineteenth century, but in the aftermath of the Opium Wars and the Treaty of Nanking, British

power was asserted to open up extensive and advantageous trade with China. Robert Fortune was employed by the Royal Horticultural Society to undertake expeditions in China to collect specimens and it is by these means that many of the now well-known species of plants, such as magnolia, peony and wisteria entered European and American garden design.[29]

Similarly, the gold, diamonds and jade that made up this Parisian jewellery did not have European origins. In the nineteenth century, the importation of these precious materials into Europe was inextricably linked to colonialist exploitation. In the eighteenth and first half of the nineteenth century, the largest source of gold in Europe was from South America. Diamonds were also found in Brazil in 1728, providing an important alternative source to the famous diamond mines of Golconda in India.[30] Both gold and diamonds were mined substantially through the use of slave labour, imported to Brazil from the Congo and Angola region of Africa.[31]

In the late-nineteenth century, South Africa entered the arena of global trade in both gold and diamonds. Diamonds were discovered in Kimberley in 1871. Though a rush of ad hoc extraction followed, the South African mines were swiftly rationalised into the hands of a few individuals, such as the De Beers company, and practices were industrialised.[32] A similar pattern of industrial extraction, white ownership and black labour, characterised the successful development of the South African gold mines in the 1890s. As we have seen, the use of semi-precious materials, particularly enamel and coloured glass, play an important role in reframing Lalique's jewellery as art, rather than the simple setting of gems. But gold and diamonds never disappeared from his work and continued to assert their traditional allure in new arrangements.

The modernity of the period around 1900 was represented by the new ambiguity of art forms: flowers that metamorphosed into women, women who metamorphosed into sphinxes, houses in which the inside contained the outside and visions of other worlds. In this way, the flux and instability of the modern world might be embraced, rather than denied. When one looks beyond the rhetoric that had become the norm within the repertoire of the modern designer, that his (or her) work represented a decisive and overdue break with the past, Art Nouveau represents a solid bridge between the design theories of the nineteenth century and twentieth century modernism.

Notes

1. See for example: Gabriel P. Weisberg, Anna-Maria von Bonsdorff, and Hanne Selkokari, *Japanomania in the Nordic Countries*, 1875-1918 (New Haven: Yale University Press, 2016); Gabriel P. Weisberg, Edwin Becker, and Évelyne Possémé, *The Origins of L'art Nouveau: The Bing Empire* (Amsterdam: Van Gogh Museum, 2005) and Mirjam Gelfer-Jørgensen, *Influences from Japan in Danish Art and Design 1870-2010* (Copenhagen: The Danish Architectural Press, 2013).
2. See for example: Sharon L. Hirsh, *Symbolism and Modern Urban Society* (Cambridge, Cambridge University Press, 2004); Rodolphe Rapetti, Rodolphe, *Symbolism*. trans. Deke Dusinberre (Paris: Flammarion, 2005) and Michelle Facos, *Symbolist Art in Context* (Berkeley: University of California Press, 2009).
3. Charles Baudelaire, *The Painter of Modern Life and Other Essays* (London: Phaidon Press 1964); Georg Simmel, *The Metropolis and Mental Life*, Donald N. Levine trans. (Chicago: University of Chicago Press, 1971).
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5. Mari Hvattum, "Crisis and Correspondence: Style in the Nineteenth Century," *Architectural Histories 1*, no. 1, Art. 21 (2013): 1-8.
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7. John Ruskin and Joseph G. Links, *The Stones of Venice (1851)* (Boulder, Colorado: Da Capo Press, 2003), 164.
8. Johann Wolfgang von Goethe, "On German Architecture" (1772) in *Goethe's Literary Essays: A Selection in English*, ed. Johan Wolfgag von Goethe and Joel Elias Spingarn (New York: Harcourt, Brace, 1921); François-René Chateaubriand and Charles I. White, *The Genius of Christianity: Or the Spirit and Beauty of the Christian Religion (1802)* 11th rev. ed. (Baltimore, Maryland: J. Murphy, 1875).
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11. Louis Sullivan, "The Tall Office Building Artistically Considered," *Lippincott's Magazine 57*, no. 3 (1896): 408.
12. Barry Bergdoll, "Of Crystals, Cells, and Strata: Natural History and Debates on the Form of a New Architecture in the Nineteenth Century," *Architectural History 50* (2007): 1-29.
13. Lauren S. Weingarden, *Louis H. Sullivan and a 19th-Century Poetics of Naturalized Architecture* (Farnham, England; Burlington, VT: Ashgate, 2009), 273-277.
14. Richard A. Etlin, "Louis Sullivan: The life-enhancing symbiosis of music, language, architecture, and ornament," in *The Orchestration of the Arts: A Creative Symbiosis of Existential Powers*, ed. Marlies Kronegger(Dordrecht: Springer, 2000), 165-182.

15. James R. Abbott, "Louis Sullivan, Architectural Modernism, and the Creation of Democratic Space," *The American Sociologist 31,* no.1 (2000): 62-85.
16. Sullivan, "Tall Buildings," 409.
17. Amy Catania Kulper, "Private House, Public House: Victor Horta's Ubiquitous Domesticity," in *Intimate Metropolis: Urban Subjects in the Modern City*, ed. Vittoria Di Palma, Diana Periton and Marina Lathouri (London; New York: Routledge, 2009), 113-114.
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