

# 3D Design Beal/TFA 6th Form



# Course objectives



3D Design at Beal and TFA campus is a practical course that helps students develop skills in design for products of any kind or the built environment.

Here are some facts about our course below. You can also click on the link, which takes you to our exam board website.

<https://www.aqa.org.uk/subjects/art-and-design/as-and-a-level/art-and-design-7201/subject-content/three-dimensional-design>

- 60% coursework
- 40% practical exam (15 hours)

Term 1 of year 12, we set three units for skills building. We teach drawing and modelling methods and introduce students to design history and to the importance of selecting and using source materials

Term 2 of year 12 and on to the end of term 1 of year 13, student's work on their chosen brief, designing and realising their intentions to the point of building their final piece. Coursework is evidenced in sketchbooks and notebooks and students present their selected work from this extended project for assessment.

Students can access a wide-range of tools and equipment to complete their project work including CAD CAM. They are encouraged to select materials independently for exploration and to complete their realisations.

Students show their skills and ability to plan and prepare for their final exam. This part of the course runs from February of year 13. Students consolidate all that they have learned over the course in a closely-timed exam unit, where they follow a theme set by the exam board and deliver a personal response in the realm of product design or the built environment.

**This booklet contains a wealth of source material to help you get started in finding inspiration. It also gives advice on how to organise your time with independent study and HW tasks.**



# What you will need

To be a successful designer, you are advised to invest in good quality drawing materials. So, you can complete activities at home, we advise you equip yourself with the following,

## Fine liners

<https://www.winsornewton.com/uk/graphic-art/fineliners/>

## A good quality set of drawing pencils

<https://www.winsornewton.com/uk/graphic-art/pencils/graphite-pencils-studio-collection/>

## Promarker pens for render and presentation work

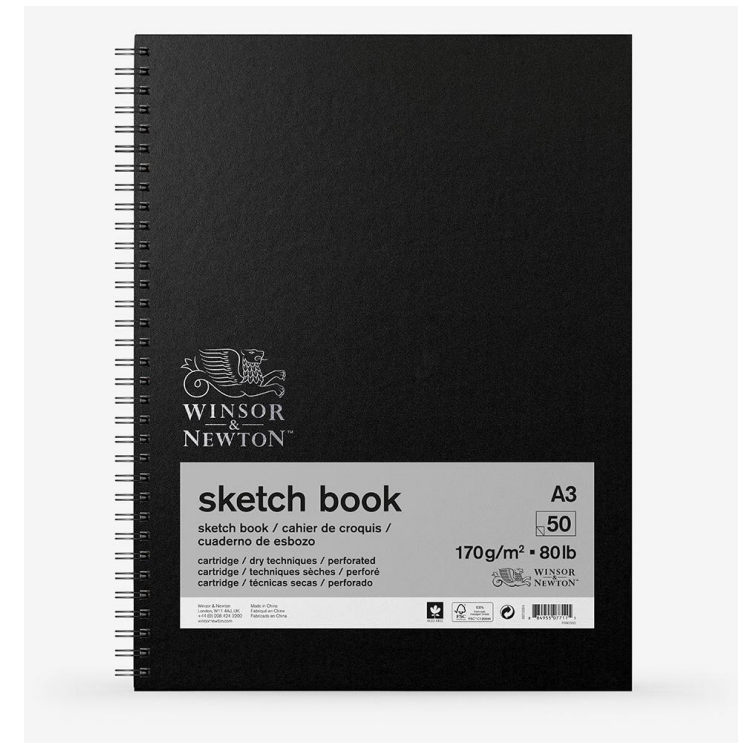
<https://www.winsornewton.com/uk/graphic-art/graphic-markers/>

## Sketchbook (A3)

Some students prefer to work on loose A3 paper and put work in clear wallet folders

## White gel pen

We will provide materials for modelling. Students can also make use of our wide range of materials for finishing their work.





## Independent study KS5 3D Design

There are 2 different activities you can do during your independent study time.

**1)** You can spend an hour in the workshop completing practical/CAD work. Teachers in the DT department will do their best to accommodate you in the classroom.

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**2)** The second activity is to build explorations within your component 1 coursework, your exam prep work, or your mini projects (year 12 only). Please use the starter activities on this PDF to do this. We would like you to use these starter activities in the following manner.

To begin a new exploration, look at the influential designs and decide whether any might be relevant to your project. If they are, read on and complete the DART task – this can be done on a separate piece of paper other than your book, but you can also use the questions to frame your write up of the design/designer's work.

Once you've completed this, choose an activity to get you started on an exploration. Before you start the activity, you may choose to do further research on the designer's other work, or a key concept within the work. All this exploratory work should be added to your workbooks and dated. **Please also write next to the date 'independent study', so it is clear when this work was completed. It will be expected that one exploration from this PDF may take a group of study periods. Please ensure you date each study period to show exactly what was completed during that time.**

### HOMEWORK:

Homework is different from independent study in that you use home learning time to complete any incomplete work such as applying design strategies, annotation or building further 3D mock up models. We expect to see work from this activity PDF in your booklets as proof of independent study or slips for workshop attendance. By contrast, homework would be seen as evidence of completed class objectives.



## Turning Torso

Location: Malmö, Sweden

Year: 2005

Architect: Santiago Calatrava

Turning Torso is a neo-futurist residential skyscraper built in Malmö, Sweden in 2005. It was formerly the tallest building in the Nordic region until September 2022, when it was surpassed by Karlatornet in Gothenburg, which is still under construction. Located on the Swedish side of the Öresund strait, it was built and is owned by Swedish cooperative association HSB. It is regarded as the first twisted skyscraper in the world. The skyscraper was designed by Spanish architect, structural engineer and sculptor Santiago Calatrava and reaches a height of 190 m (620 ft) with 54 stories and 147 apartments. Turning Torso is based on a sculpture by Calatrava, also called Twisting Torso, a white marble piece based on the form of a twisting human being.

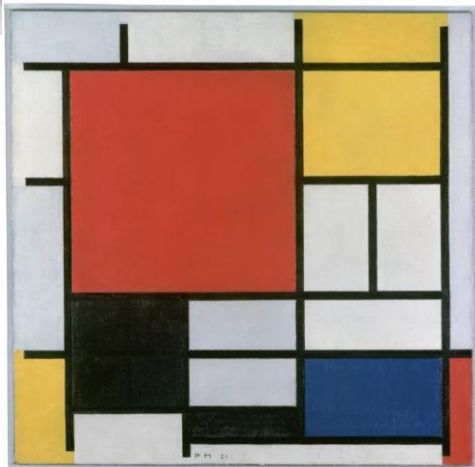
In 1999, HSB Malmö's former managing director, Johnny Örbäck, saw the sculpture in a brochure presenting Calatrava in connection with his contribution to the architectural competition for the Öresund Bridge. It was on this occasion that Örbäck was inspired to build HSB Turning Torso. Shortly afterwards he travelled to Zurich to meet Calatrava, and ask him to design a residential building based on the idea of a structure of twisting cubes

1. Where is the Turning Torso situated?
2. The Turning Torso is the first of what of its kind?
3. What is it based on, and how did what it was based on come to the attention of the client?



## Further reading

1. What is Calatrava's stylistic signature?
2. Describe how Calatrava's stylistic signature is found in his Milwaukee Art Museum commission.
3. Make a copy model of the Milwaukee Art museum from folded paper and any other light modelling material – such as toothpicks.
4. Complete a fact find on Calatrava's Milwaukee Art museum extension and include how it complements the work of Eero Saarinen.



Red blue chair  
Year: 1918-1923  
Designer: Gerrit Rietveld

In the *Red Blue Chair*, Rietveld manipulated rectilinear volumes and examined the interaction of vertical and horizontal planes in much the same way as he did in his architecture. Although the chair was originally designed in 1918, its color scheme of primary colors (red, yellow, blue) plus black—so closely associated with the Dutch de Stijl art and architecture movement—was applied around 1923. Hoping that much of his furniture would eventually be mass-produced rather than handcrafted, Rietveld aimed for simplicity in construction. The pieces of wood that compose the Red Blue Chair are in the standard timber sizes readily available at the time.

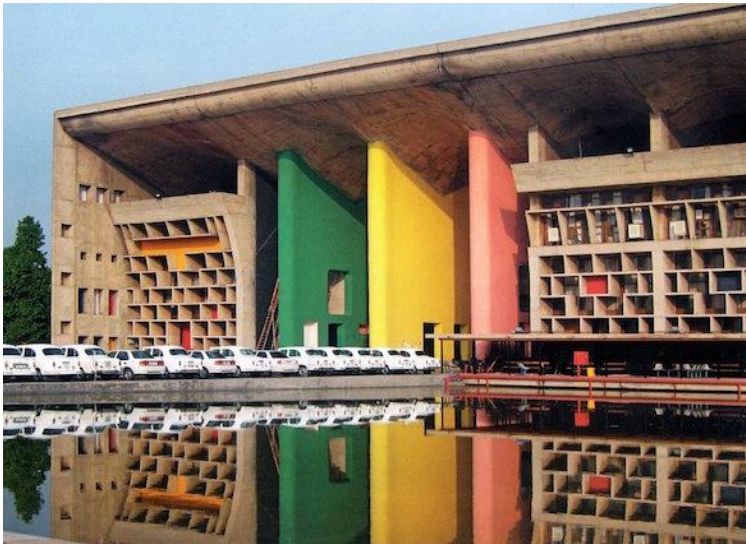
Rietveld believed that there was a greater goal for the furniture designer than just physical comfort: the well-being and comfort of the spirit. Rietveld and his de Stijl colleagues—including the movement's most famous theorist and practitioner, Piet Mondrian—sought to create a utopia based on a harmonic human-made order, which they believed could renew Europe after the devastating turmoil of World War I. New forms, in their view, were essential to this rebuilding

1. What is meant by the term 'rectilinear?'
2. Why did Rietveld aim for simplicity in construction?
3. What did Rietveld and his fellow compatriots of the DE Stijl movement think would help renew a broken Europe after WWI

#### Further reading/activities

1. Create a response to the work of Piet Mondrian. Start by creating an art board within your book that shows Mondrian's work well. Once you have this, select media carefully to recreate your own version of his work. Consider how your response could be made to reflect something your user group is known to like/dislike, or think about how different material – perhaps opaque or frosted materials would change the look of the work in your response
2. Create a copy model of the chair. Make three developments on the model. For each development of the model, write a short annotation on how the development further enhances the followers of De Stijl's 'human-made order' (apply this to today's society).





## Le Corbusier's Chandigarh

Le Corbusier's Chandigarh is a masterful architectural project that embodies a distinct design philosophy and addresses several critical issues in its construction. The philosophy behind this design aimed to create a modern city that would cater to the needs of its residents, while also reflecting the ideals of post-independence India. Le Corbusier envisioned a city with a functional and efficient layout, combining residential, commercial, and institutional spaces in a harmonious blend. One of the main concerns addressed in the construction of Chandigarh was the need for urban planning and infrastructure development in a rapidly growing country. Le Corbusier's design emphasized open spaces, greenery, and a meticulous road network, ensuring the city's long-term sustainability. Additionally, Chandigarh's construction took into account the social aspects of community living, incorporating cultural and recreational facilities to foster a sense of unity and well-being among its inhabitants. Le Corbusier's Chandigarh continues to inspire architects and urban planners worldwide, serving as a testament to the power of thoughtful design and visionary thinking in shaping the urban landscape.

- How does Le Corbusier's design philosophy for Chandigarh reflect the ideals of post-independence India?
- Explain the main concerns that were addressed in the construction of Chandigarh and how Le Corbusier's design addressed them.
- In what ways did Le Corbusier's design of Chandigarh prioritize sustainability and long-term planning?
- Describe the social aspects incorporated into the construction of Chandigarh and how they contribute to a sense of community among its residents.
- Reflect on the significance of Le Corbusier's Chandigarh as a testament to the power of thoughtful design and visionary thinking in shaping urban landscapes







## Exploring the Blavatnik Building Extension: Herzog and de Meuron's Vision

The Blavatnik Building, also known as the Switch House, is an impressive architectural extension of the Tate Modern in London, designed by the renowned architects Herzog and de Meuron. Inspired by the industrial history of the Bankside Power Station, upon which the museum was originally built, their vision for the Blavatnik Building was to create a striking structure that seamlessly integrates with the existing Tate Modern while adding a new dimension to the museum experience.

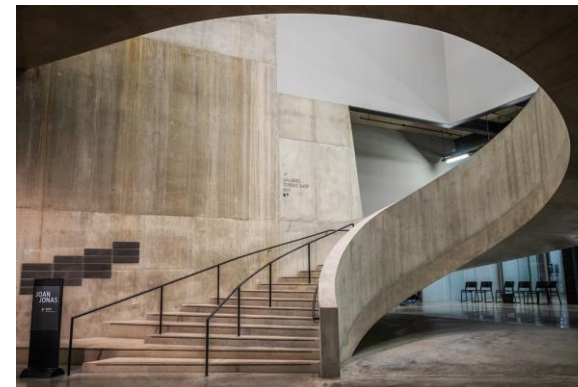
The design of the Blavatnik Building reflects the architects' admiration for the unique brick façade of the original power station. By utilizing a similar materiality, the extension pays homage to the building's heritage while embracing a contemporary aesthetic. The structure itself consists of a pyramid-like tower that rises above the former power station, adding height and drama to the skyline.

Functionality and practicality were major considerations in the architects' approach to the Blavatnik Building. The extension includes various galleries and exhibition spaces, allowing for the display of a greater variety of artwork and collections. Additionally, the architects incorporated social spaces and observation areas, enhancing the overall visitor experience. The unique geometric shape of the tower enables visitors to enjoy breathtaking panoramic views of London and the River Thames.

Herzog and de Meuron's concepts for the Blavatnik Building revolve around the idea of transformation and revitalization. The extension represents the ever-evolving nature of art and culture, breathing fresh life into the Tate Modern and the surrounding area. The architects aimed to create a space that sparks curiosity and engages the public, fostering a deeper appreciation for contemporary art.

In summary, Herzog and de Meuron's work on the Blavatnik Building extension of the Tate Modern showcases their ability to seamlessly blend architectural innovation with historical context. The design not only pays tribute to the power station's industrial past but also creates a dynamic environment for art and culture to flourish. With its striking structure and thoughtful integration, the Blavatnik Building stands as a testament to the transformative power of architecture and its ability to inspire and captivate.

- How does the design of the Blavatnik Building extension pay homage to the heritage of the Bankside Power Station?
- What are some of the functional elements incorporated into the Blavatnik Building that enhance the visitor experience?
- Explain the significance of the unique geometric shape of the tower in the Blavatnik Building.
- How does Herzog and de Meuron's vision for the Blavatnik Building reflect the ever-evolving nature of art and culture?
- In what ways does the Blavatnik Building serve as a testament to the transformative power of architecture?







## Dagestan Bridge

Location: Gulli, Republic of Dagestan

Year: Either 200 or 700-800 years ago

Built by: Local people

Around the world, there are many natural wonders and hidden places where strange and mysterious monuments are found. One such wonder is the famous Dagestan Bridge located near the village of Gulli. The 10 meters high bridge was built by local residents who had only wood and stone at their disposal. The bridge was constructed using long wooden logs and thick beams. It is so strong that it can even carry a modern-day car. What's curious about the bridge was that it was constructed without using a single nail. There is also not enough information on when and how the bridge was constructed. According to sceptics, this bridge is no more than 200 years old, dating back to the 19th century, but many locals claim that this wooden structure has been standing there longer – about 700-800 years old, according to what they've heard from their ancestors. Even though the structure is very old, it still functions properly. It's safe to say that the local people who built this bridge nailed it without nails.

1. What is curious about this bridge and why?
2. Describe how the bridge was constructed, according to the text
3. How have people arrived at what they think is the age of the bridge?



## Further reading

1. Find out about the Iron Bridge located in Shropshire, England. Write a detailed comparison on how it was constructed to how the Dagestan Bridge has been constructed. Use drawing taken from further research to show your understanding of how the bridges were constructed.



Wall Paintings  
Artist: Agostino Iacurci  
Date: Present

Agostino Iacurci believes in the magic of places. In his striking graphic style, the Italian-born Berlin-based artist creates monumental wall paintings and installations inspired by a location's individual identity. These huge, brightly-coloured and highly-attractive works are hard to miss, often towering over streets, pavements and pedestrians; and yet somehow, they weave themselves into the visual personality of an area, embracing local history and adding their own sense of enchantment. "My murals are always site-responsive, whether I draw inspiration from a building's colour, or from a story I came across during my research," Agostino explains. "I'm drawn to the classical Roman concept of *genius loci*, meaning a place's unique spirit. The distinctive atmosphere of a place always informs my work, even if only subconsciously."

1. What does Agostino Iacurci believe in and why?
2. How do these graphics assimilate with the visual personality of an area?
3. What does Iacurci mean when he says his murals are 'site responsive'?
4. What is meant by the Roman concept of 'genius loci'?



#### Further reading/activities

1. Fact find to uncover more of Iacurci's work and create a visual board of those that most inspire you
2. Take an image of a building – could be school. Respond to the work of Iacurci with your own graphics that are site responsive. You could work over the image with marker pens, or trace the building, then work your idea onto your drawing. You could simply sketch the building, then add the mural. Create more than one idea if you can.





## Alsteens House

Location: Overijse, Belgium

Year: 1967

Architect: Renaat Braem

Located in the serene forests of Overijse, a quiet residential community south of Brussels, House Alsteens is designed by one of the most respected Belgian modernists, Renaat Braem for the Belgian political cartoonist, graphic artist and painter, Gerard Alsteens. The Alsteens house, completed in 1967, is a sculptural structure, nestled among trees in a sleepy, leafy residential neighbourhood outside the village's main core. Just 30 minutes by train from Brussels, this affluent part of the world has been traditionally inhabited by diplomats and expats working in the capital, so large family villas are very much part of the landscape.

Comprising three main sections, the house is a composition of cascading bricks, smooth, curved walls and a solid concrete roof with an overhang. Inside, painted white bricks create a compact, cocooning space. Steps and different levels help create 'zones' within the house. A staircase leads down to the bedrooms and bathrooms, while upstairs, a spacious living room makes for the house's real centrepiece, with its rounded corners, large strip windows and sculptural brick fireplace. After the building's completion, Alsteens and his wife bought a house in Brussels and moved there, but the Overijse house stayed in the family. Now a listed historical monument, the house returns to the family's life once again, as the permanent home of the next generation of Alsteens.

1. What do you think is meant by the reference to the term 'sculptural structure'?
2. How did the house get its name?
3. What is the house a composition of?
4. What are the 'zones' within the house and how are they arranged?

### Further reading/activity

1. Do further reading into the Alsteens house and draw up a floor plan.
2. On the floorplan, make amendments to the design to improve the layout of the house to suit the users stipulated in your brief.
3. Modernist houses can often look industrial and impersonal. Over an image of the house, add design features that would make the interior or exterior look more personal



Kirsch House  
Location: Oak Park, IL  
Year: 1982  
Architect: Errol J. Kirsch

Built in 1982 by the architect Errol J Kirsch for himself, this massive brutalist house dubbed “The Bunker” in the suburb of Oak Park, Illinois resembles the kind of structures seen in science-fiction movies and stands out among its traditional neighbours. The house’s design was influenced by the energy crisis of the 1970’s. The architect was very focused on energy. Obviously, a house with smaller windows and thicker walls has some inherent energy-saving properties. He calculated the window openings and the prevailing winds to make it more energy-efficient. The Kirsch residence’s geometric form gives a sense of security, and it has a sharply pitched roof, a ziggurat form and slit windows. The masonry mass provides heat mitigation and windows are designed to pick up solar gain. The tall chimney at the top seems to be for a heat stack strategy.

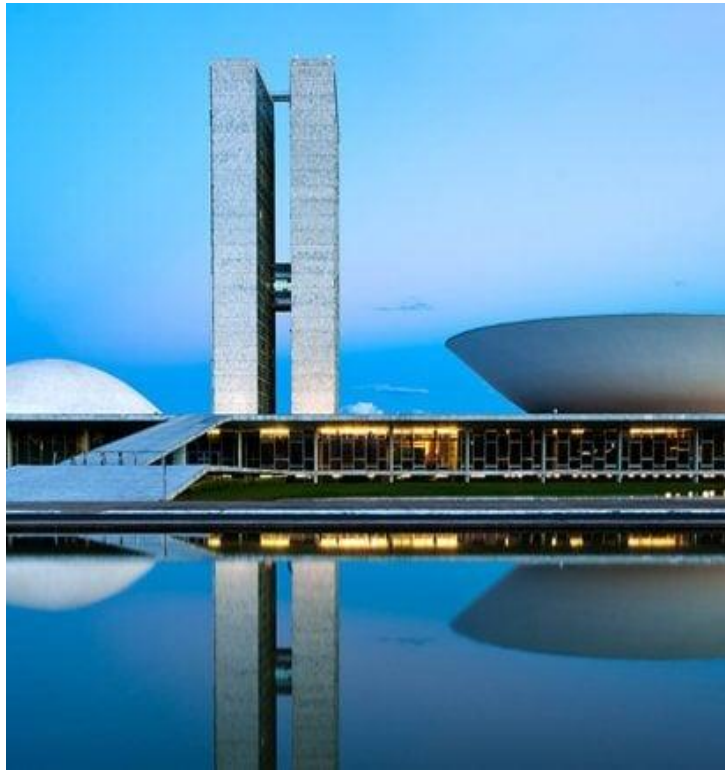


1. The house is described as resembling the structures seen were?
2. Why do you think the house has been dubbed ‘the bunker’
3. What was the architect very focussed on?
4. What calculations did he make to improve energy efficiency?
5. With its sharply pitched roof and slit windows, the house is described as taking what form?

#### Further reading/activities

1. Create a fact-finding source on the Ziggurat style
2. Develop one of your ideas/models following inspiration of the Ziggurat style
3. Redesign one of your ideas within your component 1 or mini project work to show how you've considered a better use of energy following the same considerations for conserving energy use that Kirsch made in this design





## The National Congress Building: A Symbol of Democracy in Brasília

The National Congress building is one of the most iconic landmarks in Brasília, Brazil's capital city. Designed by architect Oscar Niemeyer, this impressive structure serves as the seat of the Brazilian legislature and is a powerful symbol of democracy.

Completed in 1960, the National Congress building is located at the eastern end of the Esplanade of Ministries, a long avenue that runs through the heart of Brasília. The building consists of two distinct towers: the Senate Tower and the Chamber of Deputies Tower. These towers are connected by a large circular structure known as the Dome of Congress.

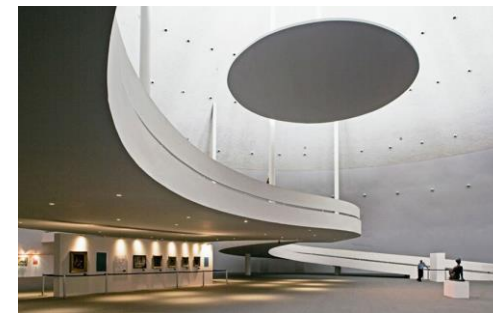
The Senate Tower, rising to a height of 92 meters, is home to the Federal Senate, while the Chamber of Deputies Tower, standing at 100 meters, houses the Chamber of Deputies. The towers are made of reinforced concrete and feature sleek, curved lines that are characteristic of Niemeyer's architectural style.

The most striking feature of the National Congress building is the Dome of Congress. This large circular structure, with a diameter of 50 meters, serves as the central meeting space for the two chambers of the Brazilian legislature. The dome is supported by sixteen columns and features a glass roof that allows natural light to illuminate the interior.

Inside the National Congress building, visitors can explore the various chambers and committee rooms where important legislative decisions are made. The design of these spaces reflects Niemeyer's commitment to creating harmonious and functional environments. The use of natural light, flowing curves, and open spaces creates a sense of transparency and accessibility, emphasizing the democratic nature of the institution.

The National Congress building holds great significance in Brazilian history. It was in this monumental structure that important political debates took place and crucial decisions were made that shaped the country's future. The architectural design of the building, with its grandeur and elegance, symbolizes the power and authority of the Brazilian government.

Today, the National Congress building remains a cherished symbol of democracy and a testament to Oscar Niemeyer's vision for Brasília. It continues to serve as a gathering place for lawmakers and a reminder of the country's commitment to democratic governance.



- How does the National Congress building in Brasília represent the ideals of democracy?
- Describe the architectural features of the National Congress building and how they contribute to its overall design.
- What is the significance of the Dome of Congress in the National Congress building?
- How does the design of the National Congress building reflect Oscar Niemeyer's architectural style?
- Explain the role of the National Congress building in Brazilian history and its impact on the country's political landscape.



## Fass School and Teachers Residence

Location: Senegal

Year: 2019

Architect: Toshiko Mori

Much of architecture is about taking a big vision and localizing it at the community level. And perhaps nowhere is that more evident than in the Fass School and Teachers' Residence, an elementary school on the coast of Senegal. Designed by Toshiko Mori, the circular structure was shaped by the history of the land. "The design is based on a vernacular paradigm of the Senegalese's ancient collective housing structures," says Mori. "The standard schools in that area are made up of rectangular concrete-block walls and corrugated metal roofs—very unfriendly and alienating structures which become very hot under the sun and incredibly noisy during rainfall." For the Fass School and Teachers' Residence, however, Mori sourced the land for mud-brick walls that are supported by steel and bamboo. The walls were then painted white, an important step that deflects the sun's rays. The school's rooftop is a combination of bamboo and grass, another element that keeps temperatures down in the classroom (temperatures can regularly exceed 100 degrees Fahrenheit in Fass).

"Architecturally speaking, I wanted to expand the potential of a familiar, vernacular building typology and to transform it into a new, contemporary icon of their own public institution with shared functions and spaces," explains Mori. In other words, the Japanese-born architect successfully took a big vision and localized it in a meaningful way.

1. The circular structure of the school is shaped by what?
2. How did Mori achieve a more 'friendly' outcome for the building?
3. What was applied to deflect the sun's rays?

### Further reading/activity

1. The Fass School is an example of vernacular architecture. Find out what this is and collect some examples. Present your examples well and try to describe how they've developed from the needs and cultures within the places where they've been built.
2. Many examples of vernacular architecture make use of local traditional materials and continue the traditional methods of manufacture that were used in the past by a particular culture and/or generation. Therefore, natural materials are often exploited. Create further designs for your component 1 brief and model using traditional materials – these could be fallen branches, or leaves. If the material is not processed to form a material not recognisable to its source, then you could argue it a traditional material.







Akari light sculptures  
Company: Vitra  
Year: 1951  
Designer: Isamu Noguchi

Whenever given the opportunity to venture into the mass-production of his designs, the sculptor Noguchi seized it. In 1937, he designed a Bakelite intercom for the Zenith Radio Corporation, and in 1947, his glass-topped table was produced by Herman Miller. This design and others—such as his designs for Akari light sculptures which were initially developed in 1951 using traditional Japanese materials—are still being produced today.

In 1951 Isamu Noguchi visited the town of Gifu, Japan, known for its manufacture of lanterns and umbrellas from mulberry bark paper and bamboo. Noguchi designed the first of his lamps that would be produced by the traditional Gifu methods of construction. He called these works *Akari*, a term meaning light as illumination, but also implying the idea of weightlessness.

With the warm glow of light cast through handmade paper on a bamboo frame, Isamu Noguchi utilized traditional Japanese materials to bring modern design to the home. Like the beauty of falling leaves and the cherry blossom, Noguchi wrote, Akari are “poetic, ephemeral, and tentative.” And he was fond of saying, “All that you require to start a home are a room, a tatami, and Akari.”



- 1) Who produced Noguchi's glass-topped table design?
- 2) What was the traditional method of construction that Noguchi found in Japan and sought to develop for mass-production?
- 3) What does the Japanese term Akari mean?
- 4) A tatami is a Japanese mat. What does the last quote tell you about how Noguchi sees his works in the home?

Further reading/activities.

- 1) Use Blender or Sketch up to build sculptural forms in the style of Noguchi. Copy and paste them onto images of different interiors to see what effect your quick sketch CAD ideas have on the space. If you're not sure how to go about this, you could build the walls and other features of the room in the CAD software.
- 2) Use origami techniques to fold paper to create forms that could be explored as part of your coursework. These forms could be developed into product design, architecture or even furniture design. Focus on the idea of creating the feeling of the object's weightlessness that Noguchi was known for.



## Dr. Strangelove and the War Room

Year: 1964

Designed by: Ken Adam

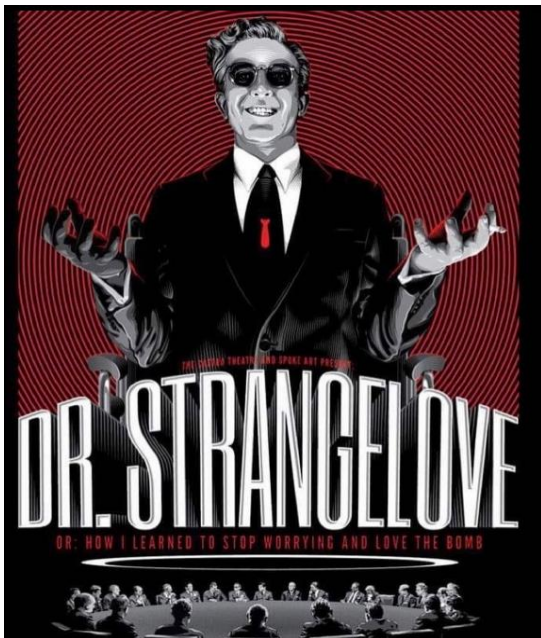
Stanley Kubrick's *Dr. Strangelove*, is known to be one of the most brilliant movies of all time, and it led to actual changes in American and Russian policy to ensure that the events depicted in the film could never occur in real life. Key to *Dr Strangelove*'s brilliance is the production design of Ken Adam. Adam's brief was to create an underground chamber in the Pentagon, the War Room – a setting that doesn't exist, but had to look convincingly like a real military installation. Adam sketched a triangular set with a steeply-sloped ceiling, since a triangular construction would be more resistant to the shockwaves from a nuclear bomb. Kubrick saw the concrete-lined brutalist bunker as metaphor for a gigantic bombshell and was instantly sold. At the centre of the room was a large circular table surrounded by 26 seats for politicians and generals. Kubrick asked that the table, which measured 22 feet in diameter, be covered in a green felt fabric—even though the movie was shot in black and white—to give the feeling that the leaders were gambling with the fate of the world like a high-stakes poker game.

Since then, Adam's design influence has gone beyond the movie set and has seeped into real-life strategy rooms and negotiation tables. The 2009 G20 summit in Pennsylvania had a similar circular table, and Adam's aesthetic is present in Vladimir Putin's three-decker military command centre.

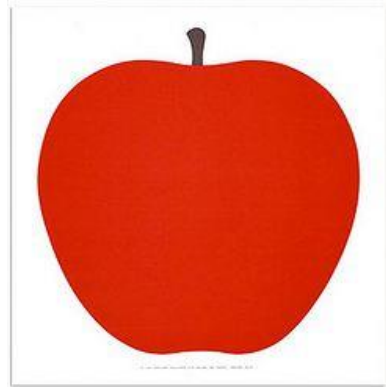
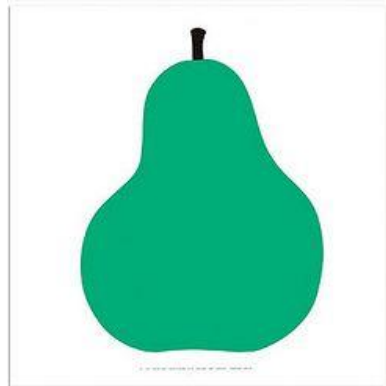
1. What did the war room need to look like?
2. Why did Stanley Kubric ask for the table to be covered in green felt?
3. How has Adam's design gone beyond the movie set?

### Further reading/activities

1. Movie sets can lead to a lot of innovation in interior design. Think of a movie whose interiors most inspired you and collect stills images from it. Comment on the design features, identifying those that you think would've been created specifically for the set. Comment on why it needed to be commissioned
2. From these stills images, create design ideas for an interior that relates to your topic area. Use perspective drawing strategies in either one, or two-point perspective. You should indicate colour and use render to ensure your material choices are communicated adequately.





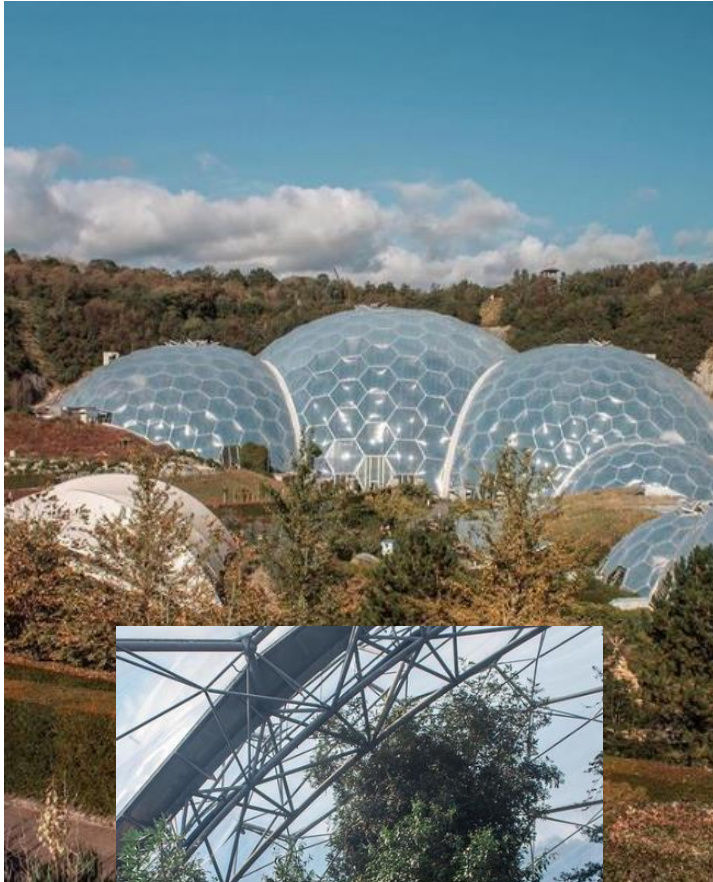


## The Work of Enzo Mari: Minimalism and functionalism

Enzo Mari was an Italian designer and artist known for his profound impact on the world of design. His work spanned various mediums, including furniture, industrial products, and graphic design. Mari's style can be characterized as minimalist and functional, with a focus on simplicity and practicality. He believed in creating designs that were accessible to all, regardless of social or economic background. One of his most notable creations is the "Autoprogettazione," a series of DIY furniture made from simple wooden boards and nails. This project aimed to empower individuals to create their own furniture, challenging the notion that design should be exclusive to the elite. Another iconic piece by Mari is the "Sedia 1," a chair made of four wooden planks joined together by a single metal bracket. This design illustrates his philosophy of reducing elements to their essential form and function. In addition to his design work, Mari authored the influential book "Autoprogettazione," which serves as a guide for creating the DIY furniture series. In it, he shares his philosophy on design and encourages readers to explore their creativity while emphasizing the importance of functionality and accessibility. Enzo Mari's work and philosophy continue to inspire designers and artists worldwide, promoting the idea that design should be inclusive and purposeful.

- How would you describe Enzo Mari's design style and philosophy?
- Give an example of one of Enzo Mari's most notable creations and explain how it reflects his design philosophy.
- What is the significance of Enzo Mari's "Autoprogettazione" project and how does it challenge traditional notions of design?
- How does Enzo Mari's book "Autoprogettazione" contribute to his overall philosophy on design?
- In what ways does Enzo Mari's work and philosophy promote inclusivity and accessibility in the world of design?





## Eden Project

Location: Cornwall, UK

Year: 2001

Architect: Nicholas Grimshaw

The Eden Project is the largest botanical garden in the world. It is a scientific experiment which uses a highly innovative technology to create different climates; with each combining ecology, horticulture, science, art and architecture. The exhibition includes more than 100,000 plants representing 5,000 species from many of the world's climate zones. The project was conceived by Tim Smit and designed by the English architect Nicholas Grimshaw and engineering firm Anthony Hunt and Associates. Grimshaw was chosen for this venture because of his experience in creating the large glass roof of the Waterloo International Terminal in London. The challenge for this project was to design buildings that provide the environment to create different microclimates. Grimshaw's starting point was the geodesic system made famous by the American architect Buckminster Fuller, who designed the Montreal Biosphere in Canada. The building opened its doors to the public in 2001 with the first two phases built.

The first phase was formed with the Visitors Centre. This is a space that serves as a link between the biomes. Phase two of the project consists of biomes that occupy the deepest part of the quarry, lying on its slopes. The Rainforest Biome and the Mediterranean Biome - each consist of several domes joined together and are joined in the middle by the Visitors Centre.

1. Who conceived of the Eden project?
2. What other structure had the architect completed successfully, which meant he was chosen for this project?
3. Who originally invented the geodesic system?
4. What is a biome in the context of the Eden Project?

### Further reading/activities

1. Use appropriate modelling materials and research to create a model of a geodesic dome. As part of your coursework, develop this into an exploration in response to your brief. The geodesic dome could be incorporated into architecture, furniture, product design, even jewellery. Create design and 3D models of your idea that make use of the geodesic dome incorporated into your idea.





## Café Era

Location: Brno, Czech Republic

Year: 1927

Architect: Josef Kranz

In 1927, when architect Josef Kranz was designing a residential building and café for Josef Špunar, he drew upon his knowledge of contemporary Dutch architecture, in particular upon the principles of the avant-garde movement of De Stijl. Its ideas were expressed in architecture through abstract compositions of right-angled forms, and contributed substantially in directing the progression of architecture towards functionalism. De Stijl's adherents conceived of buildings as systems of planes, intersecting at right angles and opening onto the exterior. The facade of the Era café fully corresponds to this concept – it is the poster child for the movement.

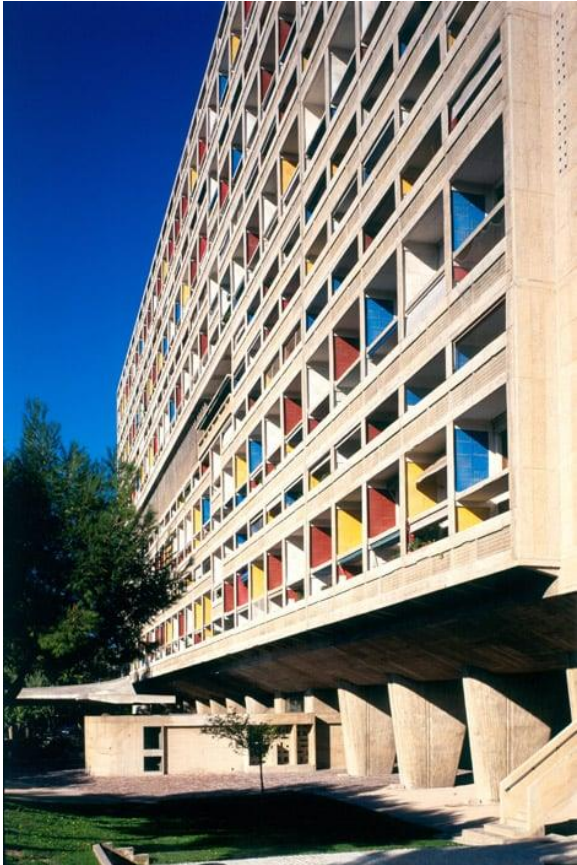
The ground floor of the café, bedecked with Thonet furniture, is dominated by the dynamic volume of the spiral staircase. In line with the foundational ideas of the De Stijl movement, this feature supplants any requirement for interior decoration, so do the colours used on the walls (light blue, white) and floors (red xyolite), since the very architectural space assumes the role of an abstract work of art. The café gradually fell into disrepair, despite being listed as a cultural monument in 1977. Thanks to the current owner, after careful monument restoration, in 2011 the café reopened its doors to visitors.

1. Where did Kranz draw his inspiration from?
2. How were the ideas of the Avant-Garde movement expressed in architecture?
3. What brand of furniture is predominately used in the café's interior?
4. What does it mean in the text, when it says the staircase supplants any requirement for interior decoration?

### Further reading/activities

1. Research into the work of De Stijl. Record findings and respond to his artwork by making a copy. Use different media to develop your response further and consider how it can be applied to your coursework; either as decals or structurally. These responses could develop your ideas in product design, architecture, furniture or interior design.
2. The Rietveld Schröder House in Utrecht, 1924 is the only building realised completely according to the principles of De Stijl. Do a research piece on this house, then respond to the 'source' through design ideas that meet your brief. Record how you've also implanted the principles of De Stijl
3. Do a research piece on Thonet furniture. Use this source to develop your ideas for furniture or product design outcomes





## Le Corbusier: A Pioneer of Modern Architecture

Le Corbusier, also known as Charles-Édouard Jeanneret, was a Swiss-French architect who revolutionized the field of architecture in the 20th century. His style, known as the International Style, embraced simplicity, functionality, and the use of modern materials. One of his most famous works is Ronchamp Chapel in France, which stands as a testament to his unique approach to design.

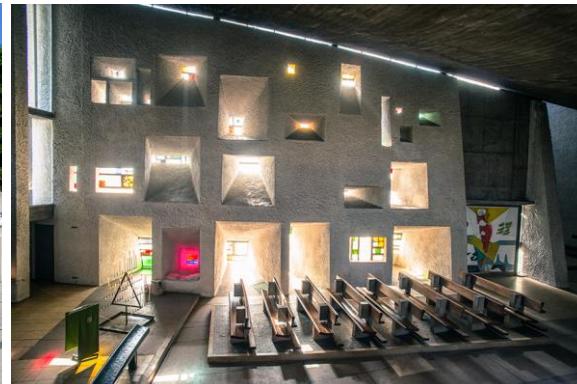
Le Corbusier believed that architecture should serve the needs of its inhabitants while maintaining a sense of beauty and harmony. His philosophy, often referred to as "form follows function," emphasized the importance of creating buildings that suit their purpose and reflect the spirit of their time. He advocated for the use of clean lines, open spaces, and natural light to create spaces that enhance human well-being.

Throughout his career, Le Corbusier designed numerous iconic buildings, including Villa Savoye in France, the Unité d'Habitation in Marseille, and the National Museum of Western Art in Tokyo. Each of these structures showcases his signature style, characterized by geometric shapes, large windows, and an emphasis on functionality.

Ronchamp Chapel, completed in 1955, is considered one of Le Corbusier's most significant works. Located in eastern France, the chapel is an innovative combination of sculptural form and spiritual space. Its unconventional design features curved walls, unconventional angles, and a unique roof structure. The use of natural light, dynamic shapes, and raw concrete creates a powerful and contemplative atmosphere within the chapel.

Le Corbusier's contributions to modern architecture transformed the way we think about the built environment. His pioneering style and philosophy continue to inspire architects and designers around the world, leaving a lasting legacy on the field of architecture.

- How did Le Corbusier's philosophy of "form follows function" influence his architectural designs?
- Describe the key elements of Le Corbusier's signature style and how they are reflected in his works.
- What are some of Le Corbusier's notable architectural achievements besides the Ronchamp Chapel?
- Explain the significance of the Ronchamp Chapel in Le Corbusier's body of work and its impact on modern architecture.
- How did Le Corbusier's approach to architecture challenge traditional design principles and influence the field of architecture in the 20th century?







Sk4 record player  
Company: Braun  
Year: 1961  
Designer: Dieter Rams



In 1955 Braun asked a young architect, Dieter Rams, to redesign the brand's offices and showrooms: the following year Rams came up with a simple idea that would represent the first milestone of his career. His revolutionary choice to use a plexiglass lid for the SK 4 record player, aka the Snow-white's coffin, quickly became industry-standard. Dieter Rams soon became responsible for all Braun's designs, leading a team that was officially established in 1961 and that the designer would guide till 1995.

In everything that Rams created in his 40 years at Braun, function is simply and logically organized, for minimalist and elegant results: he developed a total white and grey palette, with other colours used for specific functions only, and when in 1965 Rams switched to black for sound devices, all the industry did the same

1. What was the revolutionary choice of material that created a milestone in Ram's career?
2. What is the design also known as, and why do you think this is?
3. How did Rams achieve minimalist and elegant results in his designs?

#### Further reading/Activities

1. Rams famously devised the 10 principles of design, which have been used within the product design industry since. Do a research piece to find out what these are. Once you have them look over your design work and determine whether your ideas have aligned with the principles or not. If not, create responses that show how your ideas could be either redrawn or remodelled in 3D to align with Ram's 10 principles of design.



L'Oasis d'Aboukir  
Location: Paris, France  
Year: 2013  
Created by: Patrick Blanc

In 2013, botanist and researcher Patrick Blanc, also the inventor of living walls, has created a vertical garden in the heart of Paris on 2e arrondissement, covering the side of a five-storey Parisian block with waves of 7600 plants. L'Oasis D'Aboukir (the Oasis of Aboukir) is a 25-metre-high green wall featuring plants from 237 different species and appears to grow up the facade in diagonal waves. A huge spot for biodiversity, the plant wall was planted in the spring 2013 for Paris Design Week and covers the previously raw concrete facade on the corner of Aboukir Street and Petits Carreaux street.

1. What was the botanist Blanc, the inventor of?
2. How many plants feature in this piece?
3. Why was the wall planted – to mark which occasion?



#### Further reading/activities

1. Living walls and roofs can bring green spaces to otherwise bleak environments. Reimagine an urban space with an idea for a living wall, balcony, roof or even bridges/underpasses or other public spaces. Create a collage to bring the image to life and add as inspiration to your coursework.
2. Refine one or more of your design ideas within your coursework to incorporate a living feature. Use collage techniques over your designs to communicate what this would look like.





## Barbican Conservatory

Location: London, UK

Year: 1980-1984

Architect: Chamberlin, Powell and Bon

Whilst many of the world's post-war urban utopia experiments have failed miserably, London's effort to repopulate the war-ravaged City of London, The Barbican Estate, has endured as a dignified vision of an architectural idyll. Its brutalist beauty towering over now densely populated streets, a strong sense of community within — personified by the internationally renowned Barbican Centre.

A trait that few may know of is its conservatory, which is a curious tropical oasis ... a “forgotten space”. It is a secret garden in the truest sense. The verdant ‘Barbican Conservatory’ is home to over 2000 species of plants and trees. Designed by the architecture firm Chamberlin, Powell and Bon; the greenery was first planted in 1980 and took four years to cultivate, before the conservatory opened in 1984.

1. What do you think is meant by an urban utopia?
2. How long did the plants take to cultivate before the centre could open?
3. The Barbican Conservatory is described as verdant. What is meant by the term 'verdant?'

### Further research/activities

1. The Barbican Estate is one of the world's most famous examples of brutalist architecture. Brutalism is a style well-known for the exploitation of concrete as a material to realise form and create a style. Collect images of the Barbican Estate, showing how concrete has been used to different effects and finishes. Create a mood board from these images.
2. Using a Thermalite cinder/breeze block, experiment on the block to create different surface textures. Take an image of this exploration and add to your coursework. You can get these in DT but will need to work on them in the department as they create a lot of dust, which needs to be managed.
3. Redevelop some of your existing ideas in either architecture, interior design or furniture/product design, using what you've discovered from your explorations. If it's not appropriate to redevelop any existing ideas from your coursework, then you could start a new avenue.





Westhope  
Location: Tulsa, OK  
Built: 1929  
Architects: Frank Lloyd Wright

Westhope is better known as “The Big House” to those who lived there, or the Richard Lloyd Jones House to those who didn’t. Wisconsin newspaperman Richard Lloyd Jones asked his first cousin Frank Lloyd Wright to build him a residence in 1929 when Wright was struggling to get commissions. Commissioned before the Great Crash and finished during the Great Depression, Westhope was built at a difficult time in Wright’s career amid an even more tumultuous time for American society. Westhope is made with alternating piers of square glass windows and cement “textile” blocks. This was Wright's only Textile Block house outside of California. Westhope is one of the largest residences Wright ever built and its interior is among the most elusive for photographers. A backyard blessed with a swimming pool with colourful tiles of the Olympic rings added refreshment and exclusivity.



1. When was the property commissioned, then finished?
2. What was the textile block made from?
3. Why was the house also known as the 'Big House?'

#### Further reading/activities

1. Find examples of Frank Lloyd Wright's textile block houses which you like and paste them in your coursework books to create an art page.
2. Research into Mayan revivalist architecture and try to show your understanding on the page of how the textile block architecture of Frank Lloyd Wright is a good example of Mayan revivalist architectural style.
3. Make a drawing (response) to an aspect of the textile block that you think best represents Mayan Revival. Find how Lloyd Wright constructed the blocks.
4. Create a research and source response to Mayan revival architecture.





Haus-Rucker-Co  
Year: 1970s  
Based in: Vienna, Austria

When fears regarding environmental pollution and potential catastrophe were at a high in the 1970s, Haus-Rucker-Co set out to develop a “new concept of architecture.” Based in Vienna, the group was known for their interactive exhibitions and their development of utopian architectural ideas, which showed how people could affect their own environment. Their work explored the performative potential of architecture through installations and happenings using pneumatic structures or prosthetic devices that altered perceptions of space. Haus-Rucker-Co were exploring on the one hand, the potential of architecture as a form of critique, and on the other the possibility of creating designs for technically mediated experimental environments and utopian cities.

As a means of engaging citizens, Haus-Rucker-Co created performances where viewers became participants and could influence their own environments, becoming more than just passive onlookers. These installations were usually made from pneumatic structures such as Oase No. 7 (1972), which was created for Documenta 5 in Kassel, Germany. An inflatable structure emerged from the façade of an existing building creating a space for relaxation and play.

1. What did the designers do to give the perception of an altered perception of space?
2. The works hoped to achieve the ability for architecture to become a form of critique, what is meant by this statement, and do you think the work achieves this?
3. What do you think is meant by a pneumatic structure?

#### Further reading/activities

1. The concept of using air to keep a structure's integrity has been widely explored. A pneumatic structure is one that uses air pressure to keep it upright. This could be an air inflated structure, or one that uses air to keep it in place. Some examples of these are tents that use air to inflate them instead of poles. The biggest advantage of this type of structure is that large areas can be kept up, such as marquees, with less need for lots of structural support and therefore they are easily erected and moved. Create a research page on pneumatic structures and reimagine your idea as an inflatable structure. Explore how your idea would work through either using a balloon or use a hairdryer to see what shapes would be created when air is blown onto paper. Photo and record these explorations and add to your coursework



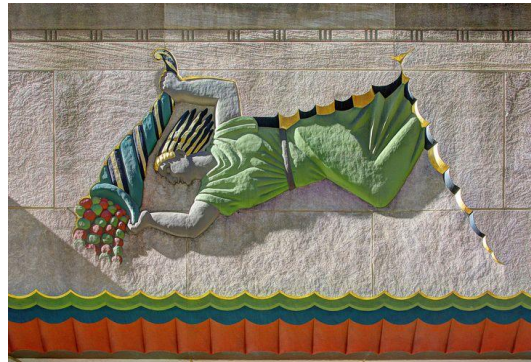




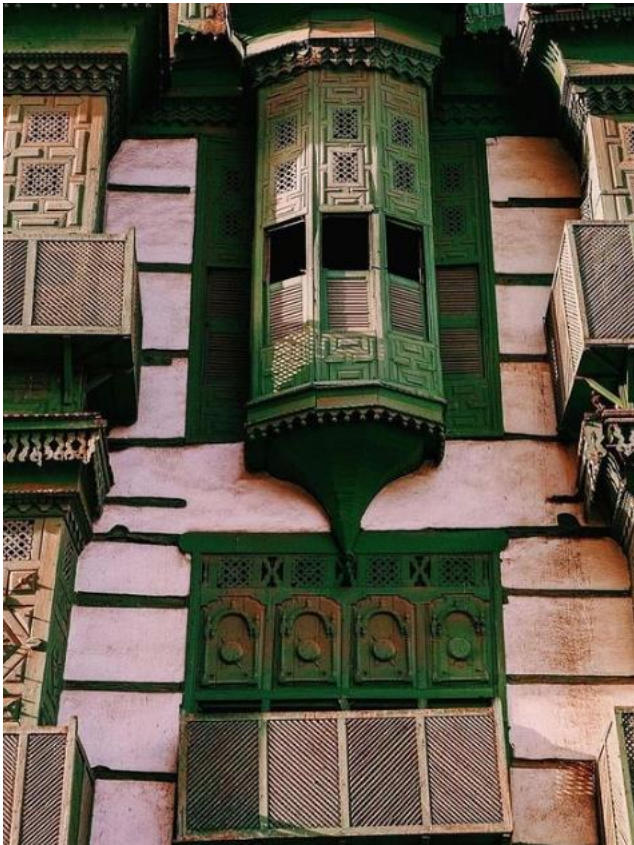
## Lee Lawrie: A Master of Art Deco Sculpture

Lee Lawrie was a renowned American artist known for his exceptional work in the field of sculpture. Lawrie's career was marked by numerous significant commissions and his distinctive style, which exemplified the essence of the Art Deco movement. One of his most notable works includes his collaboration with architect Raymond Hood on the Rockefeller Center in New York City, where he created many of the intricate architectural sculptures. Lawrie's style was heavily influenced by the period in which he worked, the early 20th century. The Art Deco movement, characterized by its sleek and streamlined forms, geometric patterns, and reverence for modern technology, greatly influenced Lawrie's artistic expression. His sculptures often featured stylized figures, bold lines, and intricate details that epitomized the spirit of Art Deco. Through his work, Lawrie left an enduring mark on the world of sculpture and contributed significantly to the Art Deco movement's legacy.

- How would you describe Lee Lawrie's style of sculpture and how does it reflect the Art Deco movement?
- What were some of Lee Lawrie's most significant commissions and how did they contribute to his reputation as an artist?
- How did the period in which Lee Lawrie worked influence his artistic expression and style?
- In what ways did Lee Lawrie's collaboration with architect Raymond Hood on the Rockefeller Center showcase his artistic talent and expertise?
- How did Lee Lawrie's sculptures in the Rockefeller Center exemplify the characteristics of the Art Deco movement? Provide specific examples.







## Al-Balad

Location: Jeddah, Saudi Arabia

Al-Balad is the historical area of Jeddah, the second largest city of Saudi Arabia. Balad can literally be translated as "The Town." The city was founded in the 7th century and historically served as the centre. The area hosts not just dwellings, but also mosques and caravansaries which altogether made it into a place where merchants might rest a while before continuing their journeys, and thereby marked it out as a centre for trade and commercial activity. Those houses that remain, often featuring multiple stories with distinctive painted wooden shutters known as roshan, usually date from two hundred years ago, and are mostly associated with the specific merchant families that built them.

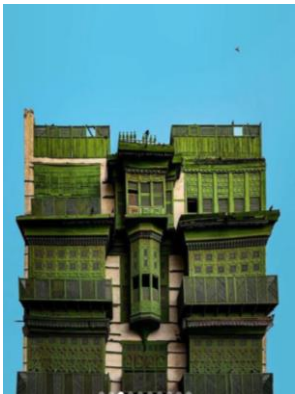
Almost all houses within al-Balad are built in the same manner with uniform construction materials that were available at that time. Consistently, the walls of these structures are found to be made of plastered coral stone blocks, known as madrepora, which was found in lagoons or quarries nearby. In order to preserve the old structures within Al-Balad, the Historical Area Preservation Department was established in 1990. The Saudi Crown Prince, Muhammad bin Salman, pledged \$13.33 million to restore the old city in Jeddah as there were 56 buildings in urgent need of repair. The city is in UNESCO's World Heritage list, since 2014.

### DART questions

1. In what area does Al-Balad lie?
2. The houses that remain as examples of the historical architecture of Al-Balad are known as what?
3. What materials were used to construct these distinctive houses, and where was this material found?
4. What was established in order to preserve the old structures?

### Further reading/Activities

1. Create responses to the style of the historic buildings that form this UNESCO World Heritage site, by drawing some of the detailed facades, to better understand their intricate patterns.
2. Create a research piece on the Al Shafi'i Mosque in Al Mazloum. This is Jeddah's oldest Mosque and recently restored. Using corrugated card, try to recreate an aspect of the building. Take photos and write up on how you've tried to recreate the shapes and styles of the relief and features of the building. Comment on what you've learned from research about this early Islamic style and how it compares to later styles that may have featured in later research you've done.

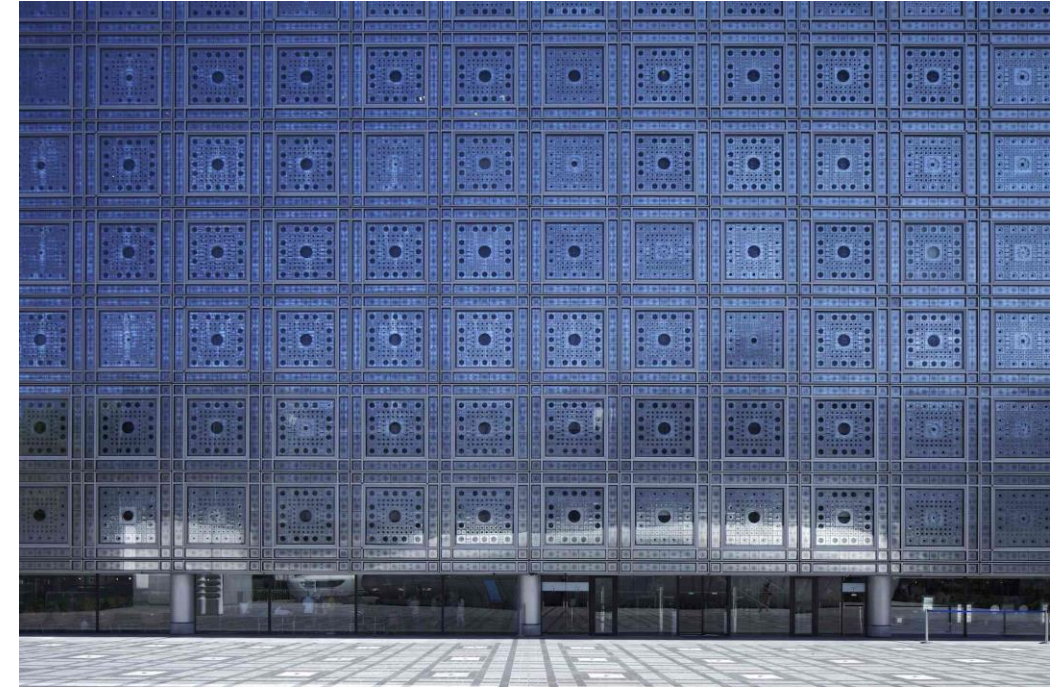




## The World Arab Building in Paris: L'institut du Monde Arabe

The World Arab Building, located in Paris, is a renowned cultural center that showcases and celebrates Arab culture. Its design is a testament to the melding of modernity and tradition. One of the most significant aspects of its construction is its mechanical facade. This innovative feature serves multiple purposes. Firstly, it acts as a shield, regulating the flow of natural light and solar radiation, ensuring optimal comfort for visitors inside. Additionally, the mechanical facade adds a unique aesthetic appeal, creating a visually dynamic and ever-changing appearance. The inclusion of a mechanical facade is a deliberate choice to capture the essence of Arab architectural heritage, where movable screens and lattice-like elements are frequently employed. This cultural center serves as a hub for a wide range of activities, including art exhibitions, performances, and educational programs, all aimed at fostering cross-cultural understanding and promoting Arab culture and heritage. The design of the World Arab Building fulfills its intention by providing a flexible and adaptable space that can cater to diverse needs. Its open-plan layout allows for seamless interaction between different areas, while also providing privacy when required. Overall, the World Arab Building stands as a remarkable testament to the harmonious fusion of cultural heritage and contemporary design, serving as a beacon for cultural exchange and understanding.

- How does the mechanical facade of the World Arab Building contribute to the comfort of visitors inside?
- What is the significance of including a mechanical facade in the design of the cultural center?
- In what ways does the open-plan layout of the World Arab Building support its diverse range of activities?
- How does the World Arab Building promote cross-cultural understanding and the celebration of Arab culture and heritage?
- Can you explain how the design of the World Arab Building reflects both contemporary design elements and traditional Arab architectural heritage?







## Isle of Dogs Pumping Station

Location: London, UK

Year: 1988

Architect: John Outram

The Isle of Dogs Storm Water Pumping Station was built between 1986 and 1988 in the east London borough of Tower Hamlets. It was designed by John Outram for the London Docklands Development Corporation and Thames Water to deal with the water run-off from the new streets being created in the redevelopment of an 8.5-square-mile stretch of the area. Described as a "highly creative reworking of a familiar formal language, executed with masterful handling of colour, pattern, scale and detail", the building is fronted by a pair of grandiose columns and features decorative eaves and a pediment covered in corrugated cladding. Dubbed "Temple of Storms" by Outram, the postmodern building is one of just seven surviving works by the architect in Britain.

### DART questions

1. Who was the Pumping station designed for?
2. What was the purpose of the building?
3. Describe what part of the building pictured is the pediment.

### Further reading/Activities

1. The piece describes Outram's work as a 'highly creative reworking of a familiar formal language.' By this, we understand that the piece compares Outram's work on the design for the columns with doric and ionic classical columns found in classical and later renaissance architecture. Find examples of classical columns that show doric and ionic types and write up a comparison of Outram's design with these examples.
2. Find examples of other post-modernist design (A well-known example is The Memphis Group). This could be in the realm of product design, furniture or interior design. Using coloured card, create models that respond to the examples you've found. Use just glue, scissors and strong folding techniques to manipulate the paper to form the shapes you want. Photo these and add to your coursework as an exploration.



## Great Wall Bamboo House

Location: The Great Wall at Shui Guan, Beijing, China

Year: 2003

Architect: Kengo Kuma

Japanese architect Kengo Kuma was chosen among ten Asian architects to design ten residences each, creating a hundred houses altogether in a forest adjacent to the Great Wall of China: an environmentally mutual commune. The architect's main concept for this project was to leave the original geographical features intact and utilize locally-produced materials as much as possible. The construction of the bamboo house has been carried out in bamboo to express the differences between this domestic wall and the Great Wall. Whereas the latter is associated to values such as strength and division, the bamboo of the former symbolizes the cultural flow between China and Japan, allowing light and air to circulate between exterior and interior. Water has been incorporated in the interior covering the courtyard, so its centre can only be reached via two concrete bridges.

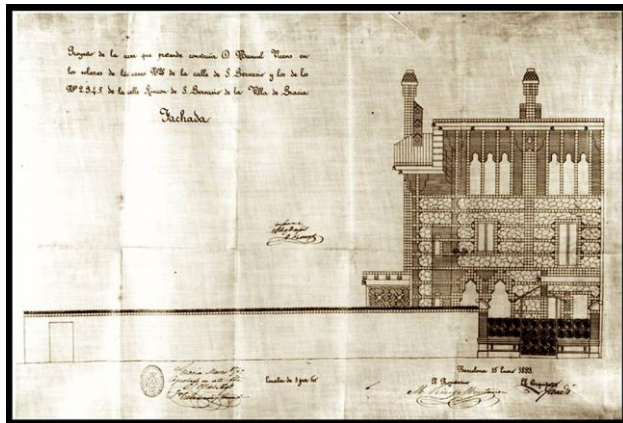
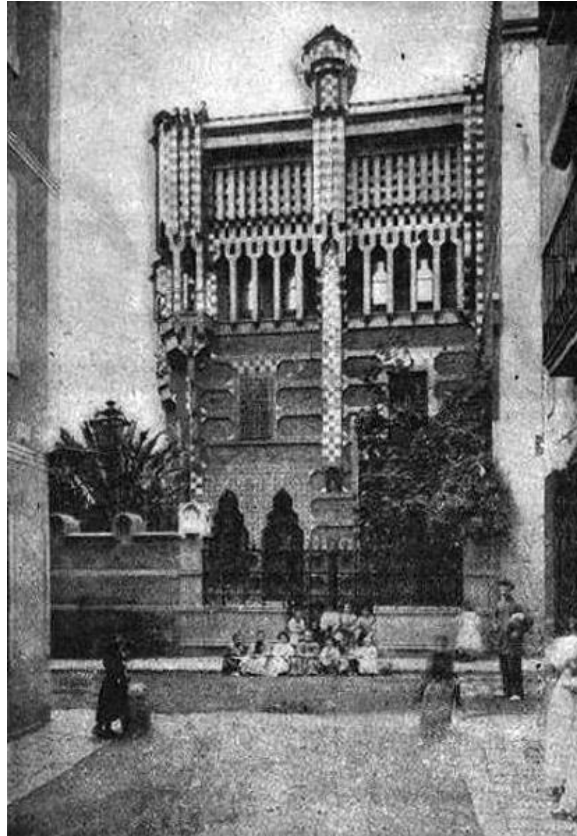
### DART questions

1. How does the construction of the bamboo house express the domestic wall compared with the Great wall as discussed in the text?
2. What structure do you need to pass to reach the centre of the property?
3. How many residences in total had been commissioned?

### Further reading/Activities

1. The architect is Japanese and creating work in China. They have chosen to make a cultural statement by choosing Japanese-style features and materials for the build, which can also be found and are exploited by China. The piece makes the point that the work attempts to show the cultural blending of Japan and China against the Great Wall, which historically was built to keep neighbours out. Consider one of your developments in terms of its cultural identity. Rework one of your explorations to include how you would include the user's cultural identity better. This can be applied to any design discipline, not just architecture.
2. Bamboo is an exceptional material, used in many areas of design from products to structures. Do a research piece on the material, then try out some explorations on the material to gauge its feasibility for your project. Record your findings in your coursework.





Casa Vicens  
 Location: Barcelona  
 Year: 1883-1885  
 Architect: Antoni Gaudi

Casa Vicens is a modernist building situated in Barcelona. It was built between 1883 and 1885, although Gaudí drew up the initial plans between 1878 and 1880. The work belongs to the orientalist style, similar to Neo-Mudéjar architecture, although interpreted in Gaudí's own personal way, with a uniqueness, which is often referred to as eclectic that only he knew how to add to his projects. In this work, and for the first time, Gaudí outlined some of his constructive resources that would become regular features throughout the emergence of Modernism.

The work belongs to Gaudí's orientalist period (1883-1888), an era in which the architect made a series of works with a distinctly oriental flavour, inspired by the art of the Near and Far East (India, Persia, Japan), as well as Hispanic Islamic art, such as Mudéjar and Nasrid. During this period, Gaudí used an abundance of ceramic tiling to decorate his work, known as trencadis as well as Moorish arches, columns of exposed brick and temple-shaped or dome-shaped finishes.

- 1) What style does the work belong to and what features do you see that shows this?
- 2) What was used to decorate the work?
- 3) What do you see in the images on the left that represent Gaudi's constructive resources?

Further reading/activities

- 1) Collect examples of Gaudi's work that exemplify his orientalist style. Make detailed drawing of these works, or of parts of them that interest you. Try to explore different media to complete your responses.
- 2) Use CAD to create a digital copy of an area of the work. Focus on a small section and explore its 3D nature through the use of either Blender or Sketchup. Try to do a number of these and print and display your work in your coursebooks.



## The Memphis Design Movement: A Revolution in Style and Philosophy

The Memphis Design Movement emerged in the early 1980s as a radical departure from traditional design norms. Led by Italian architect and designer Ettore Sottsass, Memphis sought to rebel against minimalism and embrace bold, eclectic styles instead. The movement drew inspiration from various sources, including Art Deco, Pop Art, and kitsch aesthetics. Its philosophy centered on breaking the rules and celebrating individuality and experimentation in design.

The main designers associated with the Memphis movement were Ettore Sottsass, Michele De Lucchi, and George Sowden. Sottsass, as the founder, played a critical role in shaping the movement's vision. Some of his notable works include the iconic "Carlton" room divider and the "Casablanca" sideboard. De Lucchi, another prominent figure, created the eye-catching "First Chair" and the whimsical "Tolomeo" desk lamp. Sowden's contributions include the vibrant "Picabia" armchair and the striking "Megaron" lamp. Together, these designers challenged conventional design principles and left an indelible mark on the world of interior design and visual aesthetics.

- What were the sources of inspiration for the Memphis Design Movement?
- Describe the philosophy of the Memphis Design Movement and its emphasis on design experimentation.
- Who were the main designers associated with the Memphis movement and what were some of their notable works?
- In what ways did the Memphis Design Movement challenge conventional design principles?



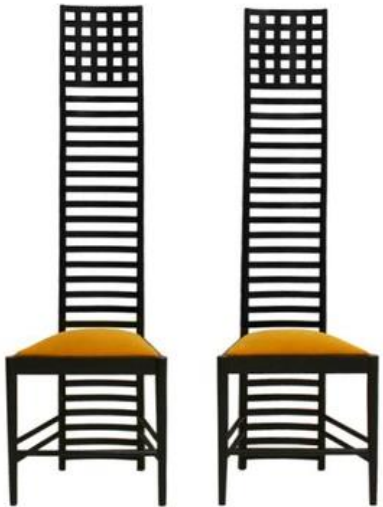


## The Style of Charles Rennie Mackintosh and His Influence from Japonisme

Charles Rennie Mackintosh was a renowned architect, designer, and artist of the late 19th and early 20th centuries. His distinctive style was shaped by a combination of factors, including his environment and the artistic movements of his time. One significant influence on Mackintosh's work was Japonisme, a fascination with Japanese art and design that was popular in Europe during the late 19th century. Mackintosh was drawn to the simplicity, asymmetry, and organic nature of Japanese designs, which he incorporated into his own unique style. His use of clean lines, geometric motifs, and delicate yet functional forms can be seen as a direct result of his exposure to Japanese aesthetics. Moreover, Mackintosh's style was also influenced by the industrial atmosphere of Glasgow, Scotland, where he lived and worked. The city's burgeoning industrialization and the Arts and Crafts movement of the time deeply impacted his approach to architecture and design. Thus, Mackintosh's distinctive style emerged as a beautiful synthesis of Japonisme, the spirit of the Glasgow School, and the changing social and artistic landscape of the late 19th and early 20th centuries.



- How did Japonisme influence the style of Charles Rennie Mackintosh?
- What were some key elements of Mackintosh's unique style?
- How did the industrial atmosphere of Glasgow impact Mackintosh's approach to architecture and design?
- In what ways did the Arts and Crafts movement influence Mackintosh's work?
- How did the changing social and artistic landscape of the late 19th and early 20th centuries contribute to the emergence of Mackintosh's distinctive style?





## The Work of Rem Koolhaas and Deconstructivism

Rem Koolhaas is a renowned Dutch architect and urban planner, who is known for his deconstructivist style.

Deconstructivism is an architectural style that challenges traditional design principles and embraces fragmentation, unconventional shapes, and dynamic forms. Koolhaas's work embodies these principles and has made him a notable figure in the architectural world.

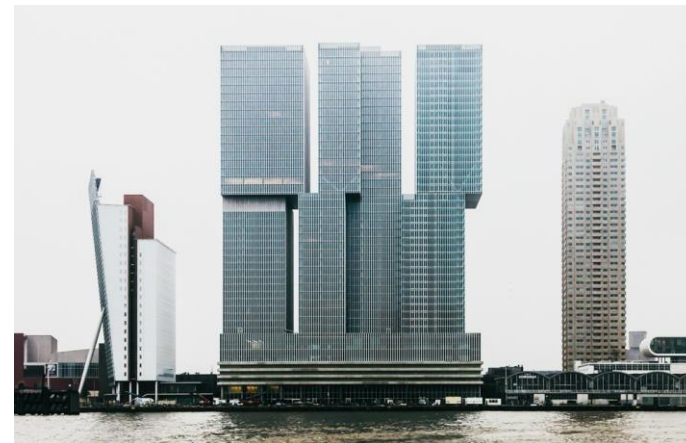
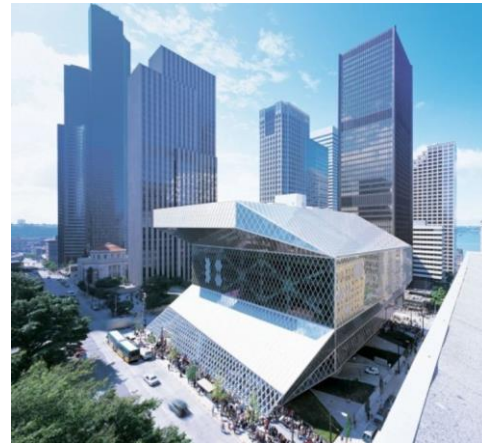
One of Koolhaas's key works that exemplifies deconstructivism is the CCTV Headquarters in Beijing, China. This iconic building features a twisted and distorted form, with two leaning towers connected by a cantilevered section. Its unconventional design challenges the notion of symmetry and stability, creating an arresting visual impression.

Another significant project by Koolhaas is the Seattle Central Library in Seattle, Washington. This architectural marvel showcases the principles of deconstructivism through its intricate geometric patterns and irregular volumes. The building's fragmented form and unique circulation system reflect Koolhaas's vision of challenging conventional spatial arrangements.

Koolhaas's philosophy revolves around the idea of embracing complexity and chaos in urban environments. He believes that architecture should respond to the ever-changing needs of society and should be adaptable to different contexts. His work often explores the relationship between architecture and urbanism, emphasizing the importance of integrating buildings into their surrounding environments.

Through his innovative designs and commitment to pushing the boundaries of architecture, Rem Koolhaas has established himself as a key figure in the realm of deconstructivism. His work continues to inspire and provoke new interpretations of what is possible in contemporary architecture

- How does Rem Koolhaas challenge traditional design principles through his architectural style of deconstructivism?
- Describe the unique features and design elements of the CCTV Headquarters in Beijing, China, and explain how it reflects the principles of deconstructivism.
- In what ways does the Seattle Central Library exemplify the principles of deconstructivism? Provide specific examples of its architectural elements.
- What is Rem Koolhaas's philosophy regarding architecture and urbanism? How does his work reflect this philosophy?







## Mayan Revival Architecture in America

Mayan Revival Architecture is a unique architectural style that gained popularity in the United States during the early 20th century. This architectural movement drew inspiration from the ancient Mayan civilization of Mesoamerica. It was characterized by the use of distinctive Mayan motifs, geometric patterns, and the incorporation of pre-Columbian architectural elements.

Several architects embraced this style, including Frank Lloyd Wright, Robert Stacy-Judd, and the firm of Dinsmoor & Leighton. They saw the Mayan Revival Architecture as a way to celebrate the rich cultural heritage of the Mayan civilization and create visually stunning buildings that stood out from the prevalent architectural styles of the time.

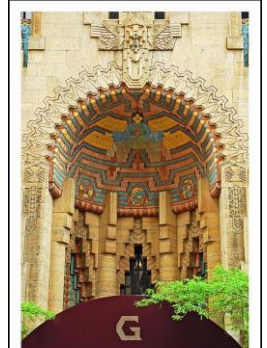
The main features of Mayan Revival Architecture included the use of stepped pyramids, decorative bas-reliefs, and intricate stone carvings. Elaborate decorative elements such as friezes, masks, and glyphs were also commonly incorporated. The buildings in this style often had flat roofs with parapets and terraced levels that mimicked the stepped appearance of Mayan temples.

The development of Mayan Revival Architecture can be traced back to the Panama-California Exposition held in San Diego in 1915. The exposition featured buildings inspired by Mayan architecture, which created a significant impact on American architects and sparked a renewed interest in the Mayan style. This, in turn, led to the incorporation of Mayan motifs in various buildings across the United States, particularly in the southwestern states.

Mayan Revival Architecture in America represents an architectural movement that sought to blend ancient Mayan design elements with modern construction techniques, resulting in visually striking and culturally significant buildings that still give a nod to the rich history of the Mayan civilization.



- Describe the main features of Mayan Revival Architecture and explain how they were influenced by the ancient Mayan civilization. Provide examples of these features in actual buildings.
- What impact did the Panama-California Exposition held in San Diego in 1915 have on the development of Mayan Revival Architecture in America? Explain how this event influenced American architects and led to the incorporation of Mayan motifs in buildings across the United States.
- How did Mayan Revival Architecture seek to blend ancient Mayan design elements with modern construction techniques? Provide examples of buildings that showcase this blend and explain how they achieved it.
- Discuss the cultural significance of Mayan Revival Architecture in America. How did this architectural movement celebrate the rich cultural heritage of the Mayan civilization? Provide examples of buildings that specifically highlight this cultural significance.





## The Influence of Egyptian Artefacts on Art Deco

Art Deco, a prominent artistic and design style that emerged in the early 20th century, holds a fascinating history that intertwines with the ability to travel and the discovery of Egyptian artefacts. As transportation became more accessible, people embarked on journeys to far-flung lands, including Egypt. These travels brought them face to face with the captivating beauty of ancient Egyptian art and architecture. The intricate patterns, bold geometrical shapes, and exquisite craftsmanship of Egyptian artifacts left a lasting impression on artists and designers. They were captivated by the elegance and grandeur of the pharaohs' tombs, the mystique of hieroglyphs, and the symbolism found in ancient Egyptian culture. Inspired by these discoveries, artists began incorporating similar elements into their work, giving birth to the art deco movement. In this innovative style, we see echoes of Egypt's influence in the geometric patterns, sleek lines, and rich colors that became hallmarks of art deco. By embracing the artistic expressions of another culture, art deco not only paid homage to Egypt but also transformed the world of art and design, leaving an indelible mark on the aesthetic landscape.

Some examples of this are,

- Chrysler Building, New York City: One of the most iconic examples of art deco architecture, the Chrysler Building features a distinctive spire adorned with triangular windows reminiscent of ancient Egyptian obelisks.
  - The Radio City Music Hall, New York City: This famous entertainment venue showcases art deco elements throughout its interior, including murals and sculptures inspired by Egyptian motifs such as lotus flowers and hieroglyphs.
  - The Egyptian Theatre, Los Angeles: Built in 1922, this theater was designed to evoke the grandeur and mystique of ancient Egypt. It features ornate columns, intricate carvings, and a colorful Egyptian-themed interior.
  - The Sun Maiden, Rockefeller Center, New York City: This art deco sculpture by Lee Lawrie depicts a female figure holding a sun disc, reminiscent of the ancient Egyptian goddesses. It showcases the sleek lines and stylized forms characteristic of art deco.
  - The Cleopatra Necklace by Cartier: Created in 1932, this stunning necklace is a prime example of art deco jewelry influenced by Egyptian aesthetics. It features a combination of geometric shapes, colorful gemstones, and delicate enamel work.
  - Egyptienne chiming clock: Created in 1927 by Louis Cartier.
- 
- How did the ability to travel impact the development of the art deco movement?
  - How did Egyptian hieroglyphs and symbolism play a role in inspiring art deco artists?
  - Describe the characteristics of art deco design that can be traced back to Egyptian influence.







## The Work of Capability Brown

Capability Brown, also known as Lancelot Brown, was a prominent figure in landscape gardening during the 18th century. His work revolutionized the English countryside, leaving a lasting impact on the way landscapes were designed and appreciated. Brown is renowned for his extensive portfolio, which includes gardens such as Blenheim Palace, Chatsworth House, and Stowe. His style, characterized by its naturalistic approach, sought to create harmonious and picturesque surroundings. Brown often reshaped terrain, creating gentle slopes and undulating hills that seamlessly blended with the existing landscape. His work was popular at the time because it embodied the ideals of the Romantic movement, which celebrated the beauty of nature. Brown's designs provided a sense of tranquility and unity between the man-made and natural elements, creating idyllic spaces for relaxation and contemplation.

Capability Brown's work had a significant influence on the Romantic movement, which celebrated the beauty of nature. Brown's style of landscape gardening, characterized by its naturalistic approach, perfectly embodied the ideals of the Romantic movement.

During the 18th century, the Industrial Revolution was transforming the English countryside. As factories and cities expanded, people began to long for the tranquil and harmonious landscapes of the past. Brown's designs provided a solution to this longing by creating idyllic spaces that seamlessly blended the man-made and natural elements.

- How did Capability Brown's naturalistic approach to landscape gardening align with the ideals of the Romantic movement?
- Describe the impact of the Industrial Revolution on the English countryside and explain how Capability Brown's designs responded to this transformation.
- Discuss the significance of Brown's gardens in providing a visual representation of the relationship between humans and nature during the Romantic movement.







## The Impact of the iMac Computer on Product Design

The iMac computer, introduced by Apple in 1998, had a significant impact on product design and revolutionized the way we view electronics. Designed by Jonathan Ive, the iMac stood out with its sleek and colorful design, breaking away from the traditional beige boxes that dominated the market at the time. This design change challenged the conventional notion that computers were dull and boring, and instead made them stylish and visually appealing. The iMac's all-in-one design, with the computer and monitor integrated into a single unit, also made it more space-efficient and user-friendly. Its innovative design and user-centric features set a new standard for product design in the electronics industry, inspiring other manufacturers to prioritize aesthetics, simplicity, and functionality in their own products. The iMac's impact on product design can still be seen today, as modern electronics often prioritize sleek design and user experience in their development

- How did the design of the iMac computer challenge traditional notions of what a computer should look like?
- What impact did the iMac's all-in-one design have on the usability and space efficiency of the computer?
- How did the iMac's design change the way we view electronics in terms of aesthetics and visual appeal?
- What were some of the key features and innovations of the iMac that set a new standard for product design in the electronics industry?
- In what ways has the iMac's impact on product design influenced the development of modern electronics?





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