

NOTES FOR TEACHERS

Le Corbusier – The Art and Architecture Exhibition

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Portrait of Le Corbusier, © FLC/ADAGP, Paris and DACS, London 2008.

Introduction

These notes are written to assist teachers in getting to know the work of Le Corbusier, suggest curriculum related work at key stages, 1, 2 and 3 and give ideas of related work for students inspired by the exhibition.

These notes will help teachers to address the following questions

- Why was Le Corbusier so important?
- How can he inspire school pupils today?
- Was he a hero or a villain?
- How did his ideas change the world?
- What were the design ideas he proposed?
- How did his design philosophy evolve?
- In what ways are these relevant to our understanding the design of the built environment today?

The Exhibition

Explore the extraordinary career and enduring legacy of Le Corbusier (1887-1965), iconic architect, designer, writer and artist, in the first major exhibition of his life and work in Britain for 20 years.

Undoubtedly the single most influential architect of the twentieth century Le Corbusier was also the most controversial. Across the world, his revolutionary designs were instrumental in the development of modern architecture, forever changing the environment in which we live and the way we think about architecture.

Featuring unique drawings, models, paintings, furniture, photographs and films, *Le Corbusier – The Art of Architecture* takes an in depth look at the projects, interiors and art of Le Corbusier and reveals the man behind the myth.

The exhibition is split into three sections entitled **Contexts**, **Privacy** and **Built Art**.

Contexts features five cities that shaped Le Corbusier's life and work and his ideas about the built environment: La Chaux-de-Fonds, Paris, Algiers, New York and Chandigarh. These cities are chosen to illustrate the historical and social context that shaped Le Corbusier's work.

Natural objects and artefacts collected by Le Corbusier introduce the idea of the "ready made" and the found object as crucial aesthetic principles for Le Corbusier, linking his work to geographic and cultural surroundings.

Privacy and Publicity shows the evolution of Le Corbusier's work until around 1930, focussing on the relation between object, architecture and the domestic space. Seven seminal houses and interiors are represented. Furniture, paintings, sculptures and

tapestries give further insight into Le Corbusier's artistic preoccupation with the human environment.

Built Art contains large scale projects mainly from the late period of his career. It shows how Le Corbusier mastered working in both small and large scale. This was a key element in his major influence on the definition of public space and the monumental in the architecture of the 20th century.

The Man and his Work

This section is split into three parts:

Section One - The Formative Years (1887-1922)

Le Corbusier was the pseudonym of the Swiss born architect Charles-Edouard Jeanneret-Gris. He was apprenticed as a watch engraver in his home town in Switzerland. This craft course was based on the ideas of the Arts and Crafts Movement and this continued to influence him when he transferred his apprenticeship to architecture. The emphasis of this apprenticeship was 'learning by doing' and so he worked with a mentor on the design and construction of houses for wealthy clients. Based on his own initiative he began travelling within Europe studying the history and theory of classical, medieval and Islamic architecture and visiting the sites and buildings from these periods of history. He analysed the structural and spatial qualities of these buildings through drawing them in the sketchbooks he carried with him. He was particularly interested in recording the ways in which he felt the builders had captured the spirit of their age in the form of these buildings.

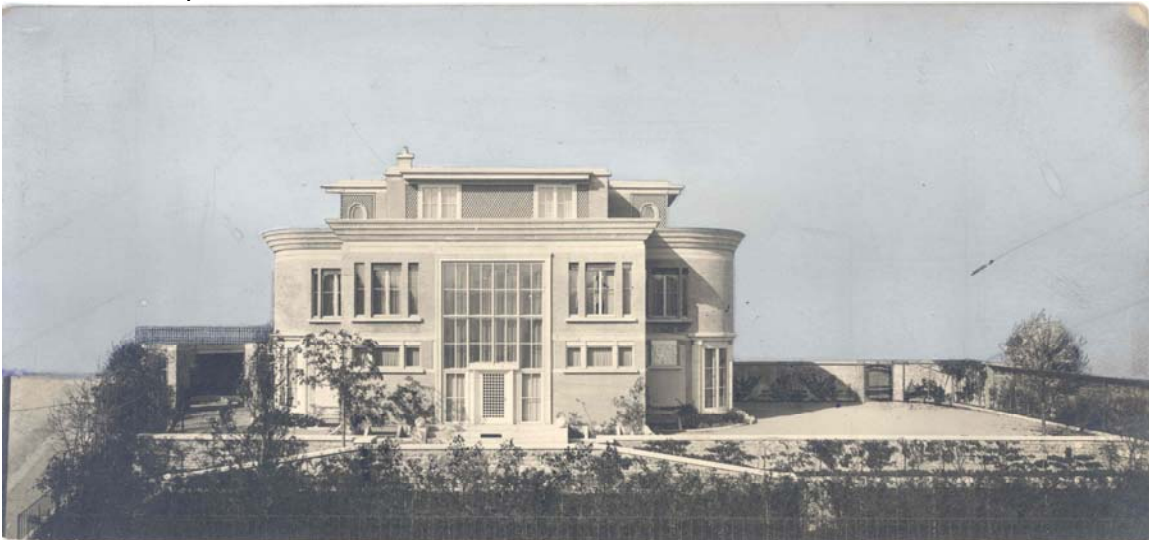
Through extensive travel and self directed study of both architectural theory and history his cultural horizons were broadened and a whole new world of ideas and fresh challenges opened up to him.

Two houses from this period shown in detail in the exhibition are:



Maison Fallet/ © FLC/ADAGP, Paris and DACS, London 2008.

Maison Fallet – A family home built on a hillside. The detail and ornament of the house is based on geometric patterns and the simplification of natural forms, like seeds and leaves. The design philosophy of this house is an extension of nature and in harmony with its site, a position that was the core of the Arts and Crafts Movement.



Villa Schwob, La Chaux-de-Fonds, 1916-17 © FLC/ADAGP, Paris and DACS, London 2008.

Villa Schwob – A home for a wealthy family wanting a design to reflect their social standing. The expression of nature, that had been so much a part of Maison Fillet has gone and any decoration is reduced to lines that define the forms of the building and link the separate parts together in a proportional composition of geometric shapes. In this design, he began to focus for the first time on the interior of the building and envisage how the occupants would experience the spaces. In later life he said that he considered this to be the first design in which he was thinking as an architect.

Section Two - A Rational Approach (1922 – 1944)

In 1922 Le Corbusier moved to Paris where he lived for the rest of his life.

He realised that his early education had been inadequate, so he attended courses in mathematics, science and engineering. He read books on philosophy, history and politics and was drawn into the avant-garde world of painters, writers and architects who envisaged themselves as social revolutionaries whose idea was to rebuild society in order to give people a better life.

In his late teens he had developed a feeling that he had a prophetic and visionary role to play in re-ordering society which he considered was in terminal decline due to its over industrialisation, commercialism and lack of social vision. This deep social commitment stayed with him throughout his life

When he set up his own studio in 1918 he started to publicise his ideas on architecture and 'the machine age' on which his design philosophy was based. For him a house was to be thought of as a machine to meet the needs of living. Public perception of the buildings based on this design approach was negative and they deemed the buildings as being ugly. However, there were wealthy clients who thought such buildings were a novelty and so many of them commissioned Le Corbusier to design the houses that were in the forefront of fashion. It was these buildings that established him on the world stage but after a number of years he became disillusioned with his buildings being fashion icons and turned to the design of buildings to meet the expanding needs of society.



Villa Savoye, Poissy, 1928-31 © FLC/ADAGP, Paris and DACS, London 2008

Villa Savoye (1928) illustrates how far Le Corbusier had moved away from his earlier Arts and Crafts approach. The rational plan and structure combine with the composition

of interlinked spaces and geometric shapes make it clear that it is a 'man made' design statement in contrast with nature. The visual contrast is given even greater impact by the building being painted white and raised off the ground on slender stilts.



Cité de refuge, Paris,1929-33 © FLC/ADAGP, Paris and DACS, London 2008.

Cité de Refuge (1929) was designed as a Salvation Army refuge for the homeless of Paris. It was the first time that such a hostel had been designed as a new building rather than converting an existing one. He took the opportunity to create a building full of sunlight and fresh air, 'a factory of goodness'. In designing this building he was also testing out many of his ideas for urban buildings in the new cities that he envisaged building.

Throughout this period of his life he was developing theories of urban design developed around the idea of high-rise buildings which he saw as the answer to the housing crisis and a way of raising the quality of life for people living in cities. The density of population in such high rise buildings released large areas of land for parks, community buildings and a segregated transport system for vehicles and pedestrians.

Section Three - **Ancient Associations (1945 – 1965)**

Le Corbusier is often presented as having a design approach that follows a defined and systematic path – a rigid sequence of one idea following another - but we can see from his own words that nothing could be further from the truth.

“When a job is handed to me I tuck it away in my memory, not allowing myself to make any sketches for months on end. That’s the way the human head is made; it has a certain independence. It is a box into which you can toss the elements of a problem any way, and then leave it to ‘float’, to ‘simmer’, to ‘ferment’. Then one fine day there comes a spontaneous movement from within, a catch is sprung; you take a pencil, a charcoal, some coloured crayons....and you give birth on the sheet of paper. The idea comes out... it is born”.

It was in this last creative period of his life that this design process came into its own and produced what many architects think of as his most poetic buildings. They are dramatically sculptural and are in sharp contrast to his earlier buildings. It is important to note that in the design of all his buildings he considered the design of every part from the smallest details to the overall structure.

Although his earlier buildings were very rational in design Le Corbusier was never totally a materialist. His buildings always have a sense of poetry and encourage the occupant to interpret them through the sensory experience of their spaces. Throughout his life he believed that the underlying order he had observed in nature and which he tried to bring to his architecture was evidence of a spiritual dimension to life that he wanted his buildings to contain.

“Architecture is the masterly correct and magnificent play of volumes brought together in light.”

He was always interested in how people experienced his buildings through their senses and this knowledge had allowed him to ‘play’ with the intensity of this experience in much the same way as a musician plays with our emotions through sound. The acoustic qualities of his buildings were very important to him, but it was the extended range of light and shadow that had the most impact in the interior spaces and contributed to the spiritual quality he wanted them to have.

He was interested in ‘the layers of memory’ that the sites of his buildings contained, and how this knowledge informed the design processes of his imagination.

He was interested in developing the visual potential that he sensed between the interior and exterior spaces of buildings and the relationship of the interior of the building to the horizon. He designed the openings in the walls to emphasise this inside/outside relationship and such openings were never just doors and windows but devices by which he could frame a specific view and in this way locate the building in its landscape.

As well as being an artist, architect and furniture designer he was also a prolific writer, with his most seminal work being *Towards a New Architecture* (1923) an impassioned manifesto giving full expression to his radical ideas on architecture and urban design. Through this book and other publications he was enormously influential among post-war architects and planners in Britain although he never built in this country. Many of his ideas for housing that were built in this country have had a ‘bad press’ for a whole range of complex reasons most of which do not invalidate the ideas but only the implementation.



Notre Dame du Haut chapel, Ronchamp, 1950-55 © FLC/ADAGP, Paris and DACS, London 2008.

Notre-Dame-du-Haut - Ronchamp (1950-54).

His most visionary work is often considered to be this pilgrimage church located on a hilltop that had been a significant religious site for centuries. Le Corbusier was invited to design the building as part of a movement in the Catholic Church to use art and architecture to explore the roots of religion. The feeling was that the traditional forms of church architecture had lost their meaning for people and that the Church had to turn to the most vigorous creators of modern art and architecture to put this right. In this building Le Corbusier responds to the sacredness of the site both for the individual at prayer within the building and to the crowds of pilgrims who gather on the hillside. The sculptural form of the building is dominated by the shape of the roof which is based on an inverted crab shell that Le Corbusier found on a beach and kept in his studio. Throughout his life he kept such natural objects around him to stimulate his imagination and promote design ideas for the detail, structure and overall form of the architecture he was creating. The unique shape of the building also responds to the acoustic needs of the interior chapels and exterior pilgrimage space. The sculptural form also emphasises the relationship of the building to its location in the landscape as pilgrims approach it from a distance.



Unité d'habitation de Marseille, roof view, 1946-52 © FLC/ADAGP, Paris and DACS, London 2008.

Unite d'Habitation (1946 – 1952)

This was the first commission granted to Le Corbusier for social housing and was an opportunity to incorporate many of the ideas he had been developing for many years. It aimed to provide accommodation for individual families in a building that promoted a sense of community. The families that were housed in this complex building had lost their homes in the recent war and so there was a great sense of this project being a 'flagship' for reconstruction. The building is constructed from in situ reinforced concrete and contains 337 apartments and communal spaces including a nursery school, shops, hotel and roof top terrace. It was in this building that Le Corbusier tested out the proportional system of measurements that he called "The Modulor". This system was developed in order "to unify" the design of the building by relating the different parts of the building one to another and to the scale of the human body. As an example of mass housing this building was very influential and four similar United'Habitation were built in France and Germany.

PROJECT WORK BASED ON THE NATIONAL CURRICULUM

Schemes of Work are listed for Art, Design and Technology and other subjects that are related – Citizenship, Geography, History, Science and Music.

The life and work of Le Corbusier presents many opportunities for carrying out cross curricular as well as individual subject project work inspired by Le Corbusier – The Art of Architecture.

The text describing the Scheme of Work in each section below are based on the text on the QCA Website – www.standards.dfs.gov.uk and this can be entered by going to their Home Page and logging on to Subject List.

The initial Scheme of Work – **Visiting a Museum/Gallery** is applicable to all stages of the curriculum.

Visiting a Museum/Gallery

KS 1 + 2 + 3

This unit provides the structure for a visit to a museum or gallery or site. The visit would be most effectively used at the start or in the middle of project work so that work back at school can be based on the information and experience acquired. If it is used at the end of a unit it can round off work in an enjoyable and exciting way but , in order to be effective, children must be able to see it as the culmination of what they have been learning .

ART AND DESIGN

Can buildings speak?

KS 1 + 2 Unit 2C Yrs 1 + 2

In this unit young people explore the shape, materials, detail and structure of buildings. They question how these features tell us something about the purpose of the building and the designer's intentions. The work of Le Corbusier is ideal for this project work because he started to design his buildings based on what happened inside them and the environment that would respond to those needs. This means that there external appearance is an expression of what happens inside them.

A Sense of Place

KS 1 + 2 Unit 6C Yrs 5 + 6

In this unit young people explore the urban landscape as a starting point for 2D-3D work in response to their exploration. They record their observations through drawing and photography. They use shape, form, space, colour, texture and pattern to develop and communicate their understanding of and response to the 'sense of place' in that location. His understanding of the characteristics of a place were fundamental to the way Le Corbusier designed his buildings in both the urban and rural locations. He developed an intuitive response to the places he visited and the sites of his buildings and this was based on his observations and his feelings about such places

What's in a Building?

KS 3 Unit 7B Yr 7

In this unit young people explore their ideas and feelings about buildings and their experiences of walking through the spaces they contain. They record the experience in drawings, collages and paintings. In the process of designing a building Le Corbusier put himself in the place of a person walking through the spaces he was designing. He wanted the spaces in the building to affect the senses of the occupants through the quality of the light, the acoustics, the shape of the spaces, their colour, their temperature, the surfaces of the space, etc.

DESIGN AND TECHNOLOGY

Homes.

KS 1 + 2 Unit D Yr 1

This unit gives young people an opportunity to understand the different types of buildings in which people live. To understand how such buildings are designed and to relate this to the design of the building in which they live. The exhibition offers the chance for them to explore the domestic buildings Le Corbusier designed. Based on this they should propose their own ideas for the spaces in a domestic building and the external appearance of the building generated by these spaces. Le Corbusier wanted the spaces in his domestic building to improve 'the quality of life' of the people who lived in them.

The World of Professional Designers.

KS 3 Unit 08f Yr 8

The main aim of this unit is for young people to learn about the work of designers and engineers who have influenced the development of the built environment in which they live. The life and work of Le Corbusier is an example of this process because he has influenced both the way that designers see their role in society and his ideas on town planning, architecture and product design have influenced the built environment in which we live.

CITIZENSHIP.

Choices

KS 1 + 2 Unit 02 Yrs 1 – 6

In this unit young people discuss their likes and dislikes and the difference between areas of the built environment they know. They discuss the knowledge and skills that are required to analyse different types of environment. As the work of Le Corbusier has had such an influence on the environment in which we live it provides an excellent vehicle for such a personal study. In understanding the work of Le Corbusier and the influence it has had we have to explore his philosophy and his aim that design should improve the quality of peoples lives.

What's in the Public Interest?

KS 3 Unit 20 Yrs 7 +9

In this unit young people consider the conflicting rights and responsibilities involved in town planning such as those of individuals and the interests of the

wider public. In his work on urban design and town planning Le Corbusier was addressing these issues throughout his life both at the scale of spaces for individual people and at the scale of political decisions that affect a whole community.

GEOGRAPHY

What is Development?

KS 3 Unit 16 Yr 9

This unit focuses on the theme of development and change in the built environment. Young people are to discuss their own sense of values as they relate to the built environment and in relation to town planning proposals to develop an area they know. This was an issue that Le Corbusier had to address in his town planning because his ideas were so radical and left little or no room for compromise. Due to their scale many of his development proposals were never built because they involved too much change in the fabric of cities but many of the ideas they contained to improve the quality of life in cities became standard practice in town planning. The debate they generated still continues as cities have to accommodate more and more people.

HISTORY.

The Life of a Famous Person

KS 1 + 2 Unit 20 Yrs 5 + 6

In this unit young people can learn about aspects of recent history through the study of the life of Le Corbusier and the impact his ideas and buildings have made on society. They will learn about changes both within and across the period, and apply their skills of historical enquiry to a study of the recent past. In his design philosophy Le Corbusier stressed the importance of historic continuity and the role that visionary and creative individuals play in the evolution of society.

The Role of the Individual

KS 3 Unit 22 Yr 7 -9

This unit gives young people the opportunity to analyze the role of the individual in history and to assess how far such a person can change the course of history. From a very early age Le Corbusier saw himself as such an individual with a visionary role to play in society. He realized that he had to equip himself to play that role through education, travel and a process of life long learning. He also felt it was important to study the lives of other 'visionary' individuals and spend time in the company of people who were having an impact on contemporary society.

SCIENCE

Grouping and Changing Materials

KS 1 + 2 Unit 2D Yr 2

Through this unit young people learn to distinguish between an object and the material from which it is made. They learn the ways materials are changed in the process of manufacture and how they are used in the process of fabrication. The buildings of Le Corbusier illustrate how he used different materials and how such materials gave 'a visual characteristic' to the buildings. His primary material became insitu concrete reinforced with steel to resist the tensile forces in such a structure. The exploration of such buildings in the exhibition and the materials they are made from make this an ideal vehicle to deliver the aims of this unit.

Light

KS 3 Unit 8K Yr 8

In this unit young people expand their knowledge of light and explore the ways in which light is used in architecture. Le Corbusier used light in many ways both functionally and to generate a sensory response in the occupants of the spaces in the buildings. He also studied the way in which the shadows cast by sunlight could increase the sculptural modeling of the exterior of the building. He orientated his buildings in relation to the path of the sun so that sunlight would enter through window and rooflights and so "dramatize" the interior. The methods he used to obtain such affects are illustrated in the exhibition in photographs, drawings and models

MUSIC

Exploring Sound Colour

KS 1 + 2 Unit 13 Yrs 3 + 4

In this unit young people explore how sounds can describe the feelings stimulated by spaces in buildings. They create simple sound compositions combining rhythm, tone and melody to illustrate the feelings generated in both internal and external spaces. Through the buildings of Le Corbusier they can explore the way he used the more abstract qualities of sound.

Music and Media

KS 3 Unit 13 Yr 9

This unit develops young peoples ability to recognize that sound enhances a visual image or the sensory experience of a building. They can use both electronic and acoustic devices to compose their own response to a space they have visited.

Soundscapes

KS 3 Unit 3 Yr 7

This unit develops young people's ability to explore sounds and using both acoustic and electronic sound sources to create a soundscape for a space or place they know or have imagined. In the exhibition they can see examples of buildings in which Le Corbusier worked with a composer/acoustician to intensify the experience of the building and its site through sound.

The Crypt– the architecture and design

The magnificent space in which the exhibition is displayed was designed by Sir Edwin Lutyens, 1869-1940 (awarded the RIBA Royal Gold Medal in 1921), one of the greatest of all British architects, as part of his epic plans for Liverpool Metropolitan Cathedral. Lutyens' designs for this extraordinary building were published in 1930. Inspired by Archbishop Downey's dream to build the greatest modern Roman Catholic church in Christendom, the Cathedral would have dominated the Liverpool skyline. At 510ft, it was immense – 60ft taller than St Peter's in Rome, twice as high as St Paul's, London. Approved by the Pope in 1933, construction started on the foundations and Crypt. By the end of the Second World War, costs for this improbably ambitious scheme had soared from £3m to £27m (the equivalent of £3.5 billion today). Plans were changed, the current striking cathedral by Sir Frederick Gibberd was eventually consecrated in 1967.

This is the first time that The Crypt has been used for a major exhibition. With its high vaulted ceilings, dark brick work and contrasting grey granite, it is the only part of the vast structure to be built and gives some feel for the grandeur of the magnificent cathedral planned to stand above it.

Where to find out more:

Book list:

These are books recommended to teachers wishing to research the life and work of Le Corbusier in more detail:

Le Corbusier – The Art of Architecture -Von Vegesack, Von Moos, Ruegg Kries
Le Corbusier - Jean-Louis Cohen
Towards An Architecture – Le Corbusier
Form and Function – Tim + Charlotte Benton and Dennis Sharp
Nature and Space – Sarah Menin and Flora Samuel
Le Corbusier – Ideas and Forms – William Curtis
Le Corbusier – Architecture and Form – Peter Blake
Ideal Cities – Ruth Eaton
Le Corbusier in Detail – Flora Samuel
Le Corbusier's Hands – Andre Wogenscky
Journey To The East – Le Corbusier

Websites:

www.greatbuildings.com

This is a site that provides information and images of a number of buildings by

Le Corbusier and other contemporary architects who he worked with him.

www.fondationlecorbusier

This the official internet site of the archive of material related to the life and work of Le Corbusier.

www.designmuseum.org

This is the site of the Design Museum in London as an excellent source of information designers who worked with Le Corbusier like the furniture designer Charlotte Perriand. It also includes information on architects who influenced Le Corbusier in his formative years like Auguste Perret, Joseph Hoffman and Peter Behrens.

www.art-nouveau

This site provides information on the Art Nouveau style in design and architecture. It explains the role of this style on the early architecture of Le Corbusier and the influence of his tutor Charles L'Eplattenier .

Architecture Organisations:

RIBA	www.architecture.com
CABE	www.cabe.org.uk
Open House	www.openhouse.org.uk
Architecture Network	www.architecturecentre.net

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