

2 ARCHITECTURE AND THE ENVIRONMENT

UNIT 1

LANDSCAPE AND THE ENVIRONMENT



Video Activity 1: Introduction to Landscape Architecture

Careers in landscape architecture

Producer: Australian Institute of Landscape Architects (www.aila.org.au)

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1

Before watching the video, answer the following questions and exchange ideas with your classmates.

- In your opinion, what is meant by "landscape architecture"?
- Do you think that landscape architects may play a key role for tourism development? Why?/ Why not?
- Would you like to follow a Landscape Architecture course at the university?
- Could it be a good job opportunity for your future?



2

Watch the video twice and complete the sentences below with one or more words.

- Landscape architecture combines art, models drawings, and text, and science:, soils, plants, topography, hydrology, and ecology.
- Landscape architects are playing an important in solving the great issues of today's modern society such as climate and providing sustainable communities.
- Landscape architecture is usually a full-time program with mandatory components for work in a landscape architect's practice or government



3 Answer the following questions.

- a. What kind of environment does land management deal with?
 - b. What are the main disciplines within landscape architecture?
 - c. What specific areas may landscape architects specialize in?
 - d. Where can university students in landscape architecture have a mandatory work experience?
 - e. What occupations does landscape architecture include?
-

UNIT 1 - 1

FRESHKILLS PARK (NEW YORK CITY)

Freshkills¹ Park will be almost three times the size of Central Park and the transformation of what was once a large **landfill** into a productive and beautiful cultural destination will make the park a symbol of renewal and an expression of how our society can **restore** balance to its landscape, combining state-of-the-art ecological restoration techniques with extraordinary settings for recreation, public art, and facilities for many sports and programs that are unusual in the city. The full development will continue in phases for the next 30 years, showing its unusual combination of natural and man-made beauty. The site is at the moment composed of hills, wetlands, open waterways, and flat areas.



Freshkills Park.

In 2001, the Department of City Planning prepared the **Draft Master Plan** for Freshkills Park. In 2006, the Department of Parks & Recreation assumed responsibility for implementing the project. The plan integrates three separate systems – **programming, wildlife, and circulation** – into one interrelated and dynamic unit.

Programming – FreshKills Park will host an incredible variety of public spaces and facilities for social, cultural and physical activity, for learning and playing.

Wildlife – Freshkills Park will also carry richly diverse habitats for wildlife, birds and plant communities. **Circulation** – An open network of paths, roads and waterways will help to create

¹ The Freshkills landfill (about 12 km²) – Staten Island – was opened in 1948 in what was then a rural agricultural area. It was supposed to be in use for only twenty years, after which the area would be split into industrial, park, and residential areas. However, after the September 11 attack on the World Trade Center, the landfill was temporarily reopened to receive and process much of the debris from the destruction.

an animated, interconnected park. People will be able to experience the site by canoe, on horseback, on mountain bike, on foot, or by car.

Freshkills Park will have five main areas: **The Confluence** (Creek Landing and The Point), **North Park**, **South Park**, **East Park** and **West Park**. Each area will have a distinct character and programming approach. **The Confluence** is the cultural and waterfront recreation core of the park, sited at the confluence of Richmond Creek and Main Creek and encircled by the park road. **Creek Landing** (80,920 mq) will be designed for waterfront activities, including an **esplanade**, canoe and boat **pier**, restaurants, a visitor centre, a large lawn for picnics and sunbathing and also a large car parking.

The Point (202,300 m²) will contain sports fields, event spaces, lawns, **artwork** and educational programming. **North Park** (942,718 m²) will be characterized by simple, vast natural meadows, wetlands and creeks. **South Park** (1,719,550 m²) will provide large natural **settings** and active recreational spaces, including soccer fields, an equestrian facility and mountain biking pathways. **East Park** (1,950,172 m²) will be a nature education area with specially designed wetlands, exhibitions and public art installations. The large hill in this area **lends itself** to a variety of recreational uses, from golf to archery. **West Park** (2,205,070 m²) hosts the site's largest hill. An enormous **earthwork** will be build on the top of the hill as a September 11th Memorial. The earthwork would be open to the sky and offer spectacular 360-degree views of the region, including a direct line of sight to lower Manhattan.

GLOSSARY



- **artwork:** attività artistica
- **Draft Master Plan:** piano regolatore di massima
- **earthwork:** terrapieno
- **esplanade:** lungomare
- **landfill:** discarica pubblica
- **pier:** molo
- **setting:** scenario
- **to lend oneself:** prestarsi
- **to restore:** recuperare



4

Read the text and decide if the statements are true (T) or false (F) and correct the false ones.



- a. Freshkills will be larger than Central Park.
- b. Today the park construction is finished.
- c. The Draft Master Plan was prepared in 2001.
- d. Plan integrates three separate systems.
- e. You can circulate in the park by car only.
- f. All the parts in the park will be similar.

T	F
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>



5

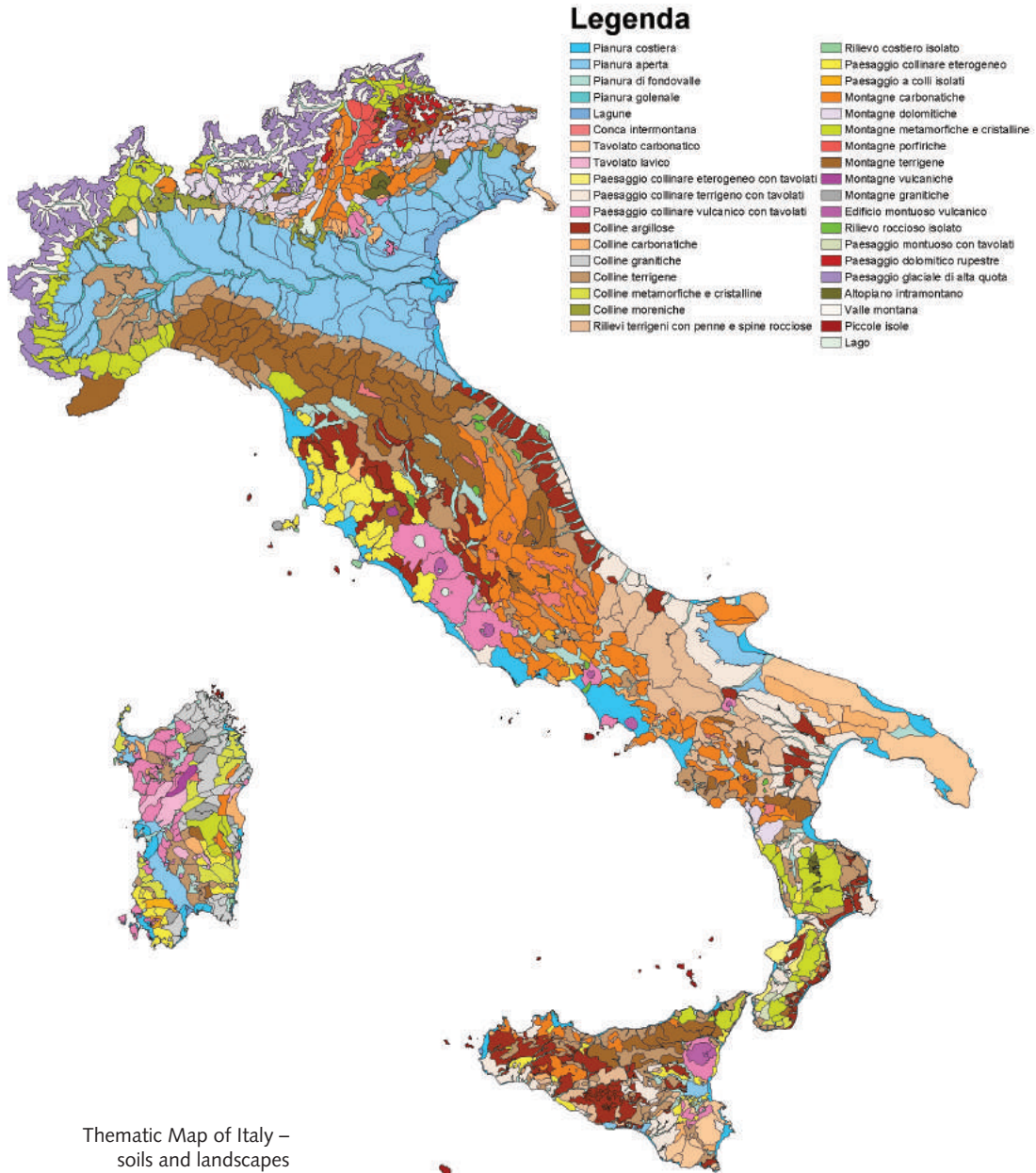
Match the words with the right definition.

- | | |
|---|--|
| a. landscape <input style="width: 20px; height: 20px;" type="checkbox"/> | 1. An area of very wet muddy land with wild plants growing in it. |
| b. wetland <input style="width: 20px; height: 20px;" type="checkbox"/> | 2. Piece of equipment you fit or put somewhere so that it is ready to be used. |
| c. waterway <input style="width: 20px; height: 20px;" type="checkbox"/> | 3. Having a meal in the open air. |
| d. picnic <input style="width: 20px; height: 20px;" type="checkbox"/> | 4. A strip of ground that people walk along. |
| e. pathway <input style="width: 20px; height: 20px;" type="checkbox"/> | 5. Everything that you can see when you look across an area of land. |
| f. installation <input style="width: 20px; height: 20px;" type="checkbox"/> | 6. Canal, river or narrow channel of sea which ships or boats can sail along. |



6 Complete the chart with the missing information.

- a. 2006
- b. The cultural and waterfront recreation core of the park.
- c. Simple, vast natural meadows, wetlands and creeks.
- d. South Park
- e. East park
- f. An earthwork as a September 11th Memorial.
- g. The Point



 UNIT 1 - 2

LAND PROTECTION IN ITALY

The Italy's Institute for Environmental Protection and Research (ISPRA) is a national public organisation, established in 2008, subject to the vigilance of the Ministry for Environment, Territory and Sea. ISPRA results from the unification of three former institutions: the Agency for Environmental Protection and Technical Services (APAT), the Central Institute for Scientific and Technological Research Applied to the Sea (ICRAM) and the National Institute for Wildlife (INFS).

ISPRA deals with a wide number of environmental issues of national relevance, including energy, waste, marine and terrestrial nature conservation, and the sustainable use of biological diversity. ISPRA provides technical and scientific support to environmental decision makers by offering the necessary tools and know-how to address economic and social changes, while safeguarding the environment and following the sustainable development paths agreed within the European Union. ISPRA's research activities are based on a close cooperation with the national and international scientific community.

(www.isprambiente.gov.it/)



7

Read the text and decide if the statements are true (T) or false (F); then correct the false ones.



- | | T | F |
|---|--------------------------|--------------------------|
| a. ISPRA is a private organisation. | <input type="checkbox"/> | <input type="checkbox"/> |
| b. ISPRA works in collaboration with the Ministry for Environment, Territory and Sea. | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Before 2008 there were three different institutions carrying on studies on the environment in Italy. | <input type="checkbox"/> | <input type="checkbox"/> |
| d. ISPRA's field of research and study is limited to land conservation. | <input type="checkbox"/> | <input type="checkbox"/> |
| e. ISPRA does not offer any know-how. | <input type="checkbox"/> | <input type="checkbox"/> |
| f. ISPRA collaborates with the national and international scientific community. | <input type="checkbox"/> | <input type="checkbox"/> |

ARCHITECTURE OF THE 19TH CENTURY

UNIT 2 - 1

Liberty Style in Italy



1 Complete the text with the words in the box. Be careful, three words are not necessary.

adopted • aesthetic • architectural • between • called • curvilinear • daily • established • examples • innovations • jewels • known • leaf • merchant • motifs • movement • new • objects • organic • painting • public • shaped • sinuous • spread • subjects • town

A new artistic (1), concerning architecture and applied arts, blossomed (2) the late 19th and early 20th centuries. It was (3) **Art Nouveau** in France, **Jugendstil** in Germany, **Secession** in Austria and **Modern Style** in Great Britain. In Italy it was called **Liberty** and (4) with the 1902 *Esposizione Internazionale di Arte Decorativa Moderna* in Turin. The new style involved architecture, (5), sculpture, visual arts, and any item used in (6) life. It was characterized by (7) (especially floral and other plant-inspired) (8), as well as highly stylized, flowing (9) forms. The English word "Liberty", used in Italian in an (10) sense, is simply a man's name: Arthur Liberty (1843-1917). He was a London (11) specialized in ornaments, fabrics and miscellaneous art (12) associated with the emerging (13) movement of Art Nouveau. Before Mr Liberty's name was (14), *Liberty Style* was simply called "*stile floreale*" (floral style). It spread in many Italian cities where fine (15) of private houses and (16) buildings can still be seen today. The *Stazione Centrale* and *Galimberti House* in Milan are the two best- (17) Liberty buildings in this city. In Turin, Liberty was (18) thanks to the work of architect Pietro Fenoglio who designed eccentric, (19) and elegant buildings – *La Fleur* house and *Villa Scott* are two of his architectural (20)

Liberty architecture also made use of many technological (21) of the late 19th century, especially the wide use of exposed iron and large, irregularly (22) pieces of glass. Attractive



Liberty Fiorentino.



S. Federico Gallery, Torino.

examples are the *Galleria Umberto* in Naples, *Galleria Subalpina* and *Galleria San Federico* in Turin. In Tuscany, the city of Florence, the spa (23) of Montecatini and Viareggio are the main places where Liberty architecture can be admired today. In Sicily, many examples can still be seen in Palermo, among them, the well-known *Villa Favoloro* and *Palazzo Dato*.

MOVING DEEPER

Villa Scott

The masterpiece of Torino's Liberty style is Villa Scott, designed by Pietro Fenoglio. It has loggias, towers, bow windows and windows with abstract or naturalistic decorations. Dario Argento, the famous thriller-horror film director, chose Villa Scott as the location for his film "*Profondo Rosso*".



THE MASTERS OF MODERN
ARCHITECTURE

UNIT 3 - 1

LUDWIG MIES VAN DER ROHE (1886-1969)

Ludwig Mies van der Rohe was born in Aachen, Germany in 1886. At the age of 19, he moved to Berlin, where he worked for Bruno Paul, the Art Nouveau architect and furniture designer. In 1908, he began working for the architect Peter Behrens and opened his own office in Berlin in 1912. In the '20s, he was active in a number of the Berlin **avant-garde** circles, such as the Magazine 'G' and made major contributions to the architectural philosophies of the late 1920s. In 1930, Mies met New York architect Philip Johnson, who included several of Mies's projects in **MoMA's** first architecture exhibition held in 1932, thanks to which Mies's work began to be known in the United States. He was director of the Bauhaus School from 1930 until 1933, when it was **shut down** under pressure from the Nazi government. He moved to the USA in 1937. From 1938 to 1958, he was head of the architecture department at Illinois Institute of Technology in Chicago. By 1944, he had become an American citizen and was well-**established**

GLOSSARY

**avant-garde:** innovative**established:** well-known**shut down:** closed

Toronto Dominion Centre.

professionally. In 1958, Mies van der Rohe designed what is often regarded as the icon of Modernist high-rise architecture, the **Seagram Building** in New York City. He created an influential 20th century architectural style. His mature buildings made use of modern materials such as industrial steel and plate glass¹. He called his buildings “**skin and bones**” architecture. He **sought** a rational approach that would guide the creative process of architectural design, and is known for his use of the aphorism “**less is more**”. Using the prototype rectangular form on columns of the Seagram Building, Mies designed a number of **notable** modern high-rise office towers, including the **Chicago Federal Centre** and the **IBM Plaza** in Chicago, the **Westmount Square** in Montreal and the **Toronto-Dominion Centre** in Toronto, Canada.



1 Fill in the chart which refers to Ludwig Mies van der Rohe.

1908	
	Opened his office in Berlin.
1920s – 1930s	
	Met Philip Johnson in New York.
	MoMA Exhibition.
1930 – 1933	
	Moved to the USA.
1938 – 1958	
	Seagram Building.



2 PAIR WORK. Refer back to the text and in turns ask and answer the following questions.

- Who did Mies van der Rohe start working for at the beginning of his career?
- How did Philip Johnson help to spread Mies van der Rohe's reputation?
- Why was the Bauhaus closed in 1933?
- How is the Seagram Building considered?
- What materials did Mies use?
- How did he define his own architecture?
- What was his most famous aphorism?
- What kind of buildings is Mies van der Rohe famous for?
- What is the main structural characteristic of these buildings?

GLOSSARY



notable: famous

to seek (sought-sought): to look for

¹ Strong polished glass containing few impurities, used for mirrors and large windows.

MOVING DEEPER

The Barcelona Pavilion

As part of the 1929 International Exposition in Barcelona (Spain), the Barcelona Pavilion, designed by Mies van der Rohe, was the display of architecture's modern movement to the world. Unlike other pavilions at the exposition, Mies understood his pavilion simply as a building and nothing more; it would not house art or sculpture, rather the pavilion would be a place of tranquillity and escape from the exposition, in effect transforming the pavilion into an inhabitable sculpture. Situated at the foot of the National Art Museum of Catalonia and Montjuic, the Barcelona Pavilion was a quiet corner isolated from the busy and lively city streets of Barcelona. In 1930, the original Barcelona Pavilion was dismantled after the International Exposition was over. However, in 1983 a group of Catalan architects began working on rebuilding the pavilion from photographs and some drawings that remained. Today it is open daily and can be seen in the same location as in 1929.



Le Corbusier Unité d'Habitation.

UNIT 3 - 2

LE CORBUSIER'S UNITÉ D'HABITATION

The *Unité d'Habitation* is the name of a modernist residential housing design developed by Le Corbusier. In 1947, Europe was still feeling the effects of the Second World War, when Le Corbusier was commissioned to design a multi-family residential housing project for the people of Marseille that were moved after the bombings on France. Completed in 1952, the *Unité d'Habitation* was the first of a new housing project series that focused on collective living for all the inhabitants in a "vertical garden city".

With nearly 1,600 residents divided among eighteen floors, the design requires an

innovative approach toward spatial organization to accommodate the living spaces, as well as the public, **shared** spaces. Interestingly enough, the majority of the communal aspects are placed on the roof. The roof becomes a garden terrace that has a running track, a club, a kindergarten, a gym and a **shallow** pool for children. The *Unité d'Habitation* is essentially a

GLOSSARY



grid: a pattern or structure made from horizontal and vertical lines crossing each other to form squares

precast: made into blocks ready to use

shallow: opposite of deep

share: to divide something between two or more people

slotted: put into a space that is available or designed for it.

“city within a city”, which is spatially, as well as, functionally optimized for the residents. The *Unité d’Habitation* is constructed from reinforced roughcast concrete, which was the least costly in post-war Europe. Structurally, it is a simple rectilinear ferro concrete grid, into which precast individual apartment units are slotted, like “bottles into a wine rack” as the architect put it.



3 Answer the following questions.



- a. What is Le Corbusier's *Unité d’Habitation*?
- b. Why was le Corbusier commissioned to design a multi-family residential housing project in 1947?
- c. What did the *Unité d’Habitation* focus on?
- d. How many residents lived in the complex?
- e. Why is the roof an important part of the building?
- f. What building material was used for its construction?
- g. What is the structure of the building?

UNIT 4

CONTEMPORARY ARCHITECTURE

UNIT 4 - 1



Peter Rice.

PETER RICE (1935-1992) AND RICHARD ROGERS (1933-)

Peter Rice was one of the most imaginative and gifted structural engineers of the late 20th century. He was much loved by the architects with whom he collaborated and together they achieved some of the most technically ingenious buildings of the period. He was born in Dundalk, Ireland in 1935 and studied engineering at Queens University in Belfast and Imperial College London. In 1956 he joined the engineering practice of Ove Arup and Partners which he collaborated with for 30 years. His first major project was working on the Sydney Opera House (designed by Jørn Utzon) when he was only 28. It was this project which gave him the experience of working on a large and complex project – a knowledge he would

put to good use in his future career. Rice worked closely on major projects with architects such as Norman Foster, Ian Ritchie, Kenzo Tange and Renzo Piano. Piano said of him, “*Peter Rice is one of those engineers who has greatly contributed to architecture, reaffirming the deep creative inter-connection between humanism and science, between art and technology.*” The long list of significant buildings for which his rigorous approach created poetic



Sidney Opera House.



Expo 1992.

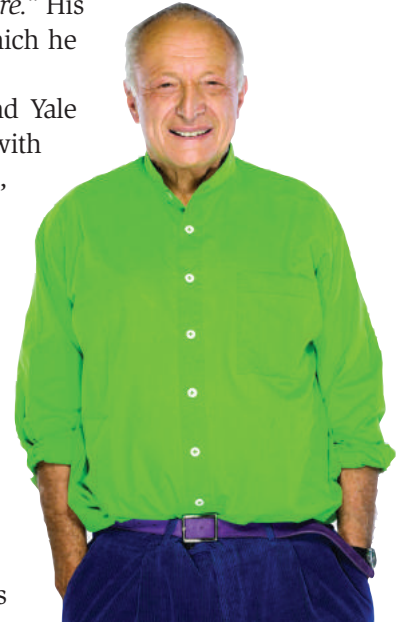
results includes a series studies of structural forms and the possibilities of various materials – concrete at **Lloyd’s of London** (designed by Richard Rogers), glass at **Les Serres** at La Villette in Paris, ferro-cement and iron at the **Menil Collection Museum**, and stone at the **Pabellón del Futuro, Expo ’92**, to name a few. **Among his numerous awards**, he was made Honorary Fellow of the Royal Institute of British Architects and in 1992 he was awarded the Royal Gold

Medal for Architecture by the Royal Institute of British Architects for his engineering work.

Richard Rogers, original name in full **Richard George Rogers**, from 1996 **Lord Rogers of Riverside**, (born July 23, 1933, Florence, Italy) is an Italian-born British architect noted for what he described as “*celebrating the components of the structure.*” His high-tech approach is most evident in the Pompidou Centre in Paris, which he designed with the Italian architect Renzo Piano.

Rogers studied at the Architectural Association in London (1954-59) and Yale University (1961-62). He returned to London to open a partnership with Norman Foster in a firm called Team 4 (1963-66). From 1970 to 1977, he worked with Renzo Piano and together they planned the world-wide famous Pompidou Centre. In 1977, Rogers created the Richard Rogers Partnership, He gained more international attention for his spectacular Lloyds of London Skyscraper (1978-86), a highly polished mechanistic tower.

Rogers’s work reached its greatest audience when he designed the Millennium Dome (1996-99) in Greenwich, England. Among Rogers’s later works is Terminal 4 (2005) at Madrid Barajas International Airport. Rogers received a number of awards, including the Japan Art Association’s Praemium Imperiale prize for architecture in 2000 and the Pritzker Prize in 2007.



Richard Rogers.



Lloyd's of London skyscraper.



Millennium Dome London.



1

Read the text and complete the chart.



WHAT	PETER RICE	RICHARD ROGERS
Date of Birth		
Nationality		
Education		
Profession		
Early works		
Architectural philosophy		
Firms		
Collaborations		
Famous works		
Awards		