



## Lesson 7: The Evolution of Design Ideas

In this lesson, students investigate the ways in which some design ideas have developed from the 5th century BC to the present day.

Support material: Information Sheet 29 “The Parthenon”, Worksheet C5, and slides or illustrations of local buildings for Discussions 1 and 2.



### Spotlight

Temples and churches



### Key Concepts

Vernacular architecture. Formal architecture.

### Review of work

On the board, record the range of building types the students discovered in the paintings they studied. Guide the discussion with questions such as these.

- How many different styles of building did they come across?
- Who were the artists they discovered?
- Did any of these artists use two-point perspective in his/her paintings?

### Discussion 1 — Vernacular and formal architecture

*Note: Teachers may want to use images of different buildings to illustrate the following points. Local examples should be easy to find.*

In the past, many buildings — houses, shops, workshops, farm buildings — had no “designer”. The builders just followed the patterns which had been used for generations. They used familiar plans, local materials and local methods of construction, placing their buildings in the landscape or townscape just as their ancestors had. These were often very good buildings because, over many hundreds of years, people had found out what worked and what didn’t. Ordinary building like these were suited to the local climate. They looked comfortable in the landscape and with each other. This is called **vernacular architecture**.

Because the weather, local materials and customs varied from one part of the country to another, a cottage in Co. Wexford may look quite different from one in Co. Donegal. Vernacular architecture helps to give different parts of Ireland their own particular character.

Other buildings — usually ones which were large or complex or which people felt were important — were consciously designed. This is called **formal architecture**. The architect and the people who owned the building thought very carefully about the plan,



the structure, the materials and how the building would look when it was finished. They wanted the building to be special, so they often looked to books, to philosophy, to other countries or to the distant past for their ideas. Then they modified these ideas to suit the place and the time in which the new building was to be built.

Temples and churches are often good examples of formal architecture. Religious buildings and places of worship are prominent in most communities. Let's take a look some buildings which have been used for worship. The way in which buildings look on the outside reflects the way in which they were designed inside.

### The Parthenon

Distribute "Drawing Guidelines" and Information Sheet 29, "The Parthenon". (The students have already seen this building in Lesson 4 "The Shape of Buildings".) Discuss these new illustrations with the students, guiding them with points such as the following.

- What do you think the Parthenon was designed for?
- Is the plan symmetrical or asymmetrical?
- What do the circles on the plan represent?
- What styles of columns can you identify in the section?
- How many columns are there altogether in this building?
- What structural systems are used in this building?
- How has the internal space been divided up?
- Put an X on the plan to show where you think the statue is located.
- What new architectural terms are used in the illustrations?
- What decorative details can you see?
- What kinds of feelings did the designers of this building want to create? Think about respect. . . fear. . . fun. . . comfort?



### Activity — Worksheet C5

Distribute photocopies of Worksheet C5. Discuss it with the students before completing it in class.

### Review of work

Discuss responses to Worksheet.

## Discussion 2 — Buildings in our community

*Note: Discussion 2 is optional, depending on the time available. It requires some advance preparation. Collect slides of some local buildings from the historical society, library or museum. If this material is not readily available, this may present a good opportunity for negotiated learning projects through which students photograph the buildings themselves in advance of the lesson.*



## BUILDINGS THROUGH HISTORY

Project slides of local buildings in class and carry on the following discussion.

- Are there any buildings in your community which have been influenced by architectural styles from the past? Consider public buildings — churches, cathedrals, market houses, courthouses. Consider domestic buildings such as great houses. Note/discuss/list those features which have been borrowed from the past.



### Scrapbook, Homework, and Vocabulary File

Refer to Worksheet C5 and discuss these assignments with the class.

### Prepare class for Field Trip in Lesson 8.

1. Distribute Worksheet C6 “Field Trip Instructions”. (The instructions can be modified to suit the interests and abilities of the class and the complexity of the building.)
2. Divide class into teams and ask them to appoint team leaders.
3. Remind them of the materials they will need.
4. For homework (possibly over a weekend or holiday), ask students to collect information about the building they are going to visit.

### Cross-Curricular Connections

1. Art History — Visit a church in your area. What style of architecture does it represent? Report on its history.
2. French — The Gothic style began in France. Study Notre Dame Cathedral in Paris through French.
3. Art — Study in detail any craft skill associated with Romanesque or Gothic architecture. Consider relief carvings, mosaics, stained glass. . . .
4. History — Make a study of the medieval craft guilds.
5. Aesthetics/History/Social Studies — “Architecture is part of the culture of a society, an expression of the values it holds.” Examine this idea in relation to a particular period in Irish history, or to today.
6. History/Design — Choose a particular building type — library, factory, school, theatre, museum, palace, prison, bank, airport — and trace its development over time.
7. Mathematics/Design — Find out about the Japanese units of measurement, the Shaku and the Ken. How is the Ken used in the design of Japanese buildings?
8. History/Design — Choose one architectural style — Greek, Roman, Byzantine, Romanesque, Gothic, Renaissance, Baroque, Neo-Classical, Georgian, Victorian, Art Nouveau, the International Style. . . . Study the way in which this style was used in a particular building type (church, theatre or library, for example).
9. Technology/Design/History — The invention of electric lighting, lifts and air-conditioning revolutionised the design of offices. Why? Study the changes which took place in American office buildings between the late 19th and mid-20th century.