

Art and tradition

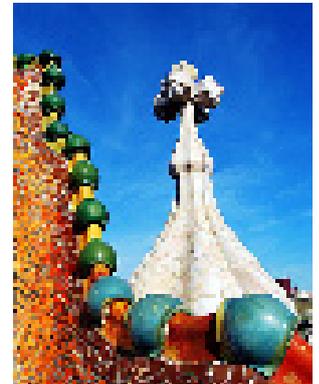
Gaudí used a wide variety of materials in his work, materials that had always been used in traditional Catalan architecture.

Investigate the following Gaudí buildings and write down the materials he used.



The meaning of the work

Look at the following photographs



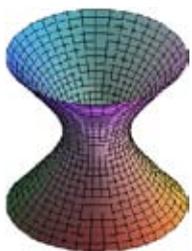
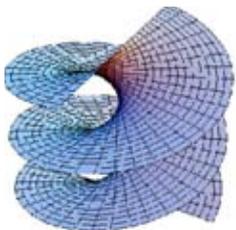
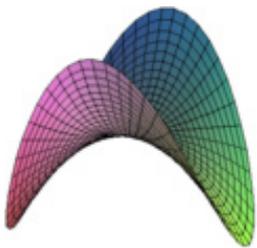
What specific topics and aspects do they suggest to you?

Ruled surfaces

Read the following definition of ruled surfaces by Joan Bassegoda:

Gaudí called squint, i.e. curved surfaces, that were comprised totally of straight lines, planoid or ruled geometry. There are only four surfaces that fulfil the requirements of planoid geometry and all of them are often found in nature, trees, the skeleton of mammals or the shapes of mountains. Gaudí used this natural geometry in architecture to achieve surprisingly functional results that were very different to the surfaces normally used by architects.

Look at the architectural forms that Gaudí achieves using ruled surfaces and state which forms of nature they take their inspiration from.



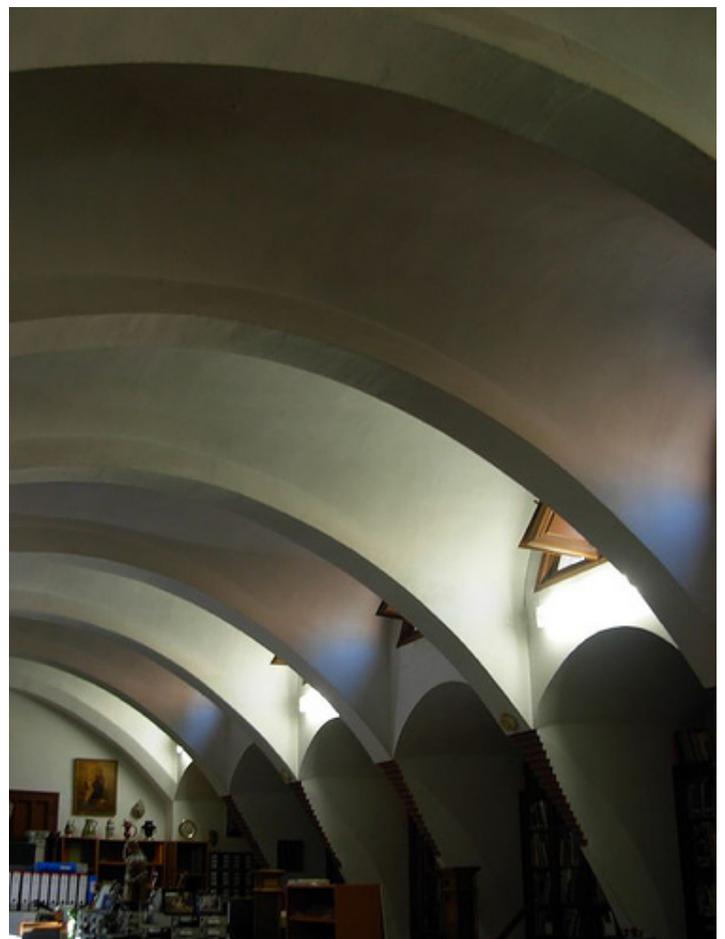
The catenary arch

Read Joan Bassegoda's definition of Gaudí's catenary arch.

The catenary arch is obtained by suspending a chain by its ends so that it forms a spontaneous, elegant and also useful curve, provided that the load is even. When it is inverted, the catenary arch is obtained.

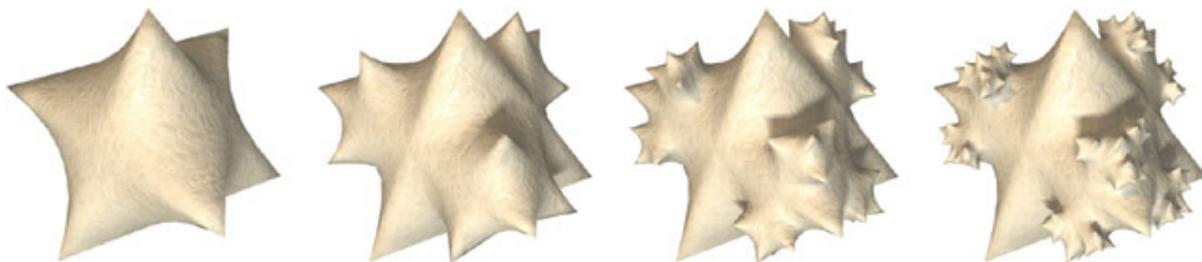
What are the advantages of the catenary arch with regard to other arches?

Look at the spaces Gaudí ceased with catenary arches and describe them.



The repetition of natural structures

One of the characteristics of Gaudí's work is the repetition and combination of structural and decorative motifs.



Investigate fractal structures and look for them in Gaudí's work.

Gaudí's challenge

Observe the ceiling of a gothic church. What is the circular part that supports the dome called?

What does Gaudí put in this place?

How do you interpret this?

