The ***Flavian Amphitheatre***, known as the ***Colosseum***, clearly illustrates the architectural and constructive concepts in use during Ancient Rome's first Imperial period. These were based on the use of **both curving, enveloping line** – which is seen in this example's elliptic plan – **and complex building systems**. In fact throughout the *Colosseum* we see a tightly interconnected use of **vaults and arches**.

Soon after its construction the amphitheatre became the **emblem of the imperial city** and of its policy uniting celebratory aims with new architectural models devoted to recreation.

History of the Monument

The *Flavian Amphitheatre* was the first and largest permanent building erected in Rome with the purpose of hosting **games and gladiator fights**.

The works began in 70 AD under Vespasian who wanted to return to the city some of the territory expropriated by Nero to create the *Domus Aurea*. By giving that land back to the people of Rome in a form in which they could enjoy it, Vespasian, the founder of the Flavian dynasty, wanted to emphasise his break with the past of his notorious predecessor. The amphitheatre was inaugurated by Titus in 79 AD and the occasion was marked by one hundred days of events. The building was finally finished under Domitian's reign.

Dating to the High Medieval period, the term 'Colosseum' was referred to this structure because of its vicinity to the huge statue, 36 metres high, that had been commissioned by Nero for the *Domus Aurea*. The amphitheatre continued to host gladiatorial events until the reign of Theodoric (493-526 AD) while, during the Middle Ages, it was incorporated into the fortifications used by the powerful Frangipane family.

A Detailed Façade

The exterior of the *Colosseum* is characterised by **three orders of arches**, lined up one row over the other, all encased by semi-columns. Originally the arches numbered 80 per row and were decorated with statues. The whole was topped by the continuous wall (punctured by windows) of the attic, or fourth story, cadenced by pilasters and roofed by an entablature. Bronze shields probably hung between the windows. The façade employs **three different architectural orders** for the rows of arches. The ground level uses the Tuscan order, similar to the Doric but with semi-columns placed on a pedestal; the second floor uses the Ionic order while Corinthian is reserved for the third story. This formal organisation made the building into a reference model during the Renaissance; it was so closely studied in all its parts that the drawings made of the vaulted arches' stucco decorations can show us today details that have almost completely disappeared over the last centuries.

However, from a formal and constructive point of view, the *Colosseum* belonged to a **well-consolidated Roman tradition**. Classical orders applied to travertine stone had already been experimented in the Republican Period in such buildings as the *Tabularium*, the *Basilica Giulia*, and the *Theatre of Marcellus* where an analogous alignment of orders had been employed.

So the *Colosseum* hardly represents any innovative set of solutions; rather it is an accomplishment surpassed only by *Domitian's Stadium*, which impressed on the ever-changing cityscape the shape of today's *Piazza Navona*.

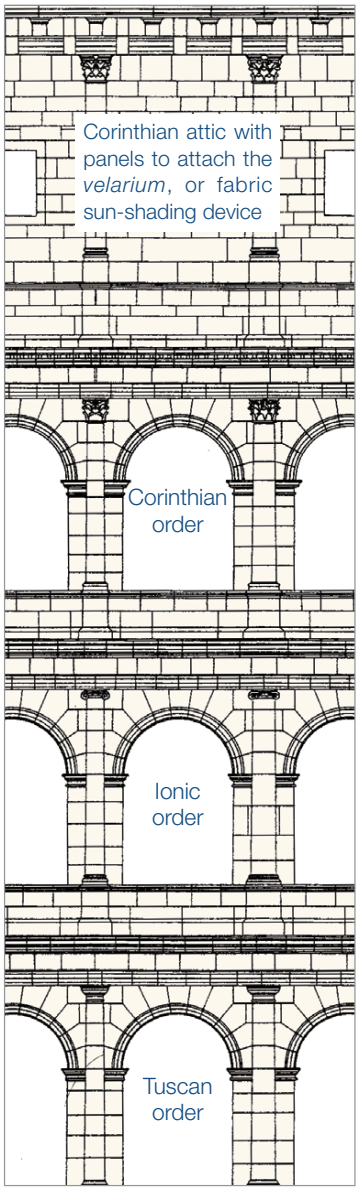


Fig. 1
Detail of the *Colosseum* façade (from M. Wilson Jones).

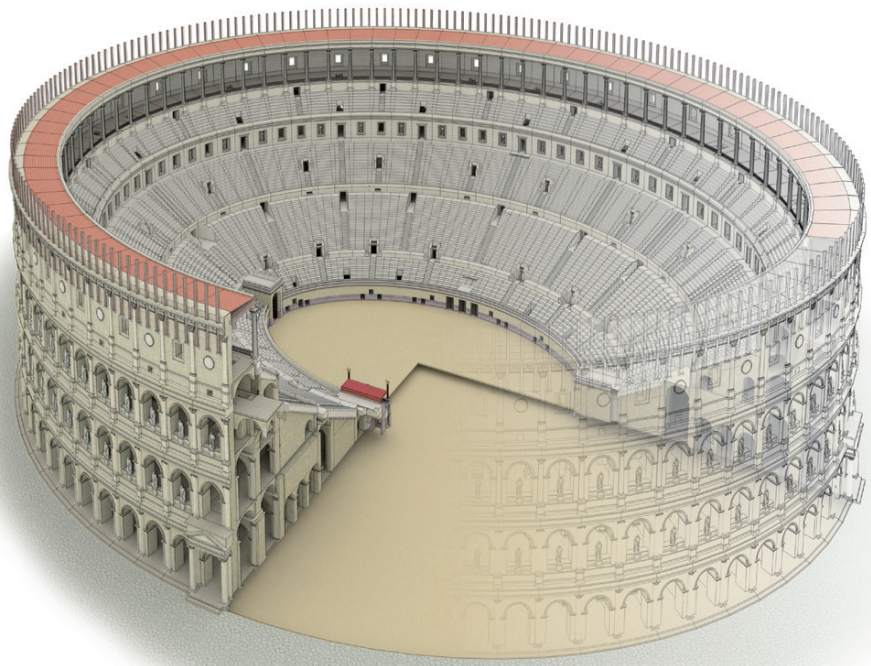


Fig. 2
Reconstructed model of the *Colosseum*. Rome, Museo della Civiltà Romana.

The panels extending from the upper part of the attic, above the row of apertures, were used for fixing long wooden poles, or *antemnae*, into channels through the architrave and the frieze. They were used to support an enormous tent-like structure called the *velarium* which sheltered spectators from the sun and rain.

Organisation of the *Colosseum*'s Interior Spaces

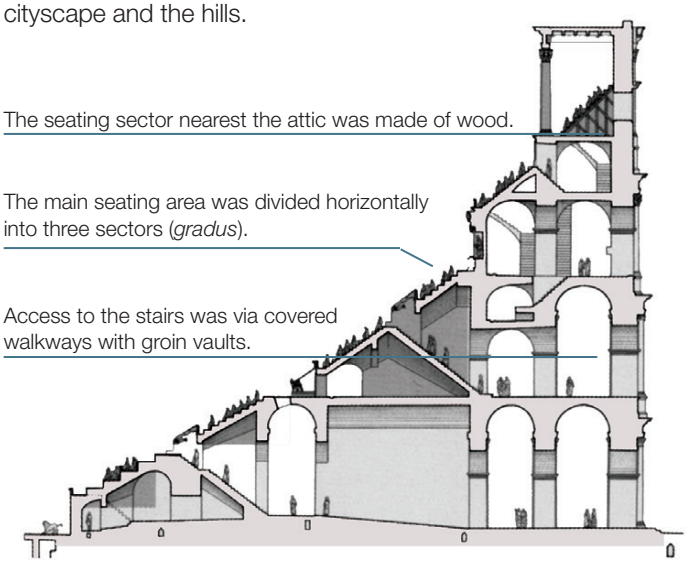
The amphitheatre has an **elliptical shape**, measuring 188x156 metres and rising almost 50 metres in height. The seating area was designed for about 50000 spectators while access was provided by **two monumental entrances** at the far ends of the ellipse. Under the wooden flooring, a number of rooms and hallways sheltered everything necessary for the spectacles, from machines and wild beasts to chambers for the gladiators.
The inner **arena**, also elliptical, measured 86 x 54 metres and a high podium, decorated with different marbles, separated it from the seating area.
Along the smaller axis the box reserved for the emperor faced the one for dignitaries opposite. Reserved seating for other authoritative spectators was marked by a bronze railing along the arena's perimeter. The lower and mid sections of the seating area were built in marble and were divided into horizontal sectors called gradus; these were, in turn, divided by stairways into semi-circular sections called cunei. All seating places were numbered.

Technical Materials and Features

The load-bearing structure of the *Flavian Amphitheatre* is built in squared blocks of travertine (also used in slabs to face the exterior), tufa stone for the inner spaces and brick. The **use of concrete** to erect the vaults and interior upper walls diminished the push of the highest seating rows against the unbuttressed attic.
Inside five radial corridors roofed by barrel vaults are supported by a complex system of pilasters in travertine. This allowed the insertion, in a second phase, of infilled walls, just the way constructions are made today with reinforced cement. Although this was a traditional technique, its use here allowed a considerable reduction in the construction time; indeed the *Colosseum* was inaugurated, before the top floor's structures were completed, a mere ten years after building had started. The construction site was organised in four main sectors where teams of independent labourers worked following the programmed dispositions for each building phase.
However, in terms of static-constructive concerns, the traditional methods that were employed privileged stone and limited the use of concrete.

The Formal Solutions

The decorative semi-columns are alternated with the arches generating a **continuous rhythm and a modulated *chiaroscuro***, thanks also to the **ever-curving surface** that follows the elliptical plan. The layout of the walkways, the organisation of the storage areas, the rational arrangement of the spaces for equipment, all compose an architecture that can be likened to **a 'functional machine**.'
But the Colosseum's main function is as **a monument** on Rome's urban scale. Indeed it is situated on an axis with the Roman Forum, serving as its theatrical backdrop. However its elliptical form does not allow it to be simply a flat background but rather points referentially to the surrounding space, to the cityscape and the hills.



Figg. 3, 4
A contemporary view of the *Colosseum* and a section of the stairs.

Read and Recognise

1 Fill in the blanks to complete the description of the *Colosseum*.

1. The Flavian _____ takes its name from the dynasty that ruled Rome during the building's construction. It is _____ in plan and was erected to host _____ and _____.
2. On the exterior the three _____ of the façade are lined up one row over the other. Originally each row counted a total of eighty _____, each one encased by _____.
3. The ground floor is characterised by the _____ order (similar to the _____ but with semi-columns are raised on a _____). The second and third rows consist of the _____ and the _____ orders respectively. The very top was built as one _____ wall (punctured by _____), cadenced by _____ and _____ by an entablature. Between the windows decorative bronze _____ were probably hung.
4. Inside the amphitheatre there were a number of _____ and _____ used to shelter machines, wild beasts, gladiators, etc. In fact gladiatorial events were held here until _____ AD circa.

2 For each sentence select the best possible answer.

1. During the First Imperial period architectural and constructive concepts
- ❍ **a.** exploited natural dips in the landscape.
- ❍ **b.** were based on enveloping, curving line.
- ❍ **c.** emphasised continuous chiaroscuro and modulated rhythm.

2. From bottom to top the three orders of arches used were
- ❍ **a.** Doric, Ionic, Tuscan
- ❍ **b.** Tuscan, Ionic, Corinthian
- ❍ **c.** Roman, Doric, Ionic

3. The use of travertine in conjunction with classical orders
- ❍ **a.** was experimented here for the first time
- ❍ **b.** had already been used in the Theatre of Marcellus
- ❍ **c.** resulted in an innovative set of solutions, similar to Domitian's Stadium

4. The semi-column
- ❍ **a.** was first used in the Basilica in Paestum
- ❍ **b.** is a half-cylinder shape mounted on a flat surface
- ❍ **c.** measures half the proportional height of a Doric column

Vocabulary

3 Match each term below with its definition.

____ **1.** Gladiator	**a.** Amusements or diversions for a public audience
____ **2.** Betting	**b.** The risk of an amount of money that a doubtful event will result in a specific way
____ **3.** Beasts	**c.** Speed competition between a two-wheled vehicle pulled by horses
____ **4.** Chariot-racing	**d.** The sport of conducting races between solid-hoofed herbivorous quadrapeds
____ **5.** Entertainment	**e.** The central part of an amphitheatre, where contests were held.
____ **6.** Arena	**f.** Wild animals
____ **7.** Horse-racing	**g.** A man trained to fight to the death with sword or other weapon

4 Review the section "Organisation of the Colosseum's Interior Spaces." Explain in your own words (max 3 sentences) what elements present in the Flavian amphitheatre are still seen today in an outdoor stadium or amphitheatre.

Follow-up

5 The term concrete is used to describe the composition of materials used to cement together and build large architectural structures. This technique was discovered by the Romans who developed its use in many important buildings. Recently a discovery about the Ancient Roman use of concrete made newspaper headlines across the world. Read the articles at
http://www.history.com/news/the-secrets-of-ancient-roman-concrete
http://www.socialstudiesforkids.com/articles/currentevents/romanconcretetoday.htm
and write your own article (1 paragraph) about what studies of ancient concrete teach us about contemporary Portland-type concrete.