



## MOVEMENT AND MODULARITY

All roads lead to Rome as the saying goes. Successful, captivating architecture compels one to approach, enter, circulate, and transcend the monuments and buildings of yesteryear and today. How one interacts with architecture is just as important as how it is viewed from a distance. The movement through space invites the telling of a story and offers a series of experiences that mark a crucial aspect of architecture: the notion of a path. As a building, a garden, or even an entire city, moving through structures, landscapes, and settlements evokes a basic need to explore and investigate one's surroundings.



*Path; David Robert Donatucci*



## Understanding “Path”

Creating a sense of path is an essential part of architecture. Early cultures carved routes through forests and deserts to connect their tribes to food supplies or burial grounds. Upon establishing a sacred space or monument, ancient civilizations would plot a path to these areas of worship or memorial. They might be a straight axis to provide easy access or as a symbolic gesture of importance, or they could wind up the side of a mountain to a lookout or snake down a steep cliff to a fishing dock. Paths sometimes run underground as a series of catacombs or high above a gorge as a bridge.

These early paths evolved to become streets and within larger structures became great halls. Even the word hall comes from an idea of procession: the king sat on a throne at one end as visitors walked down the central space toward him to present gifts.

Path is an important element in architecture that offers movement through space. In video games these paths are even more crucial and become the driving force behind staging events and presenting new space to a player as they progress through the experience.

Ultimately, the concept of path is easily understood as the circulation through or around a building or city. This can involve changes in height with ramps or stairs or can be understood as vertical travel as in an elevator.



*Winding Path; David Robert Donatucci*



## Understanding “Modularity”

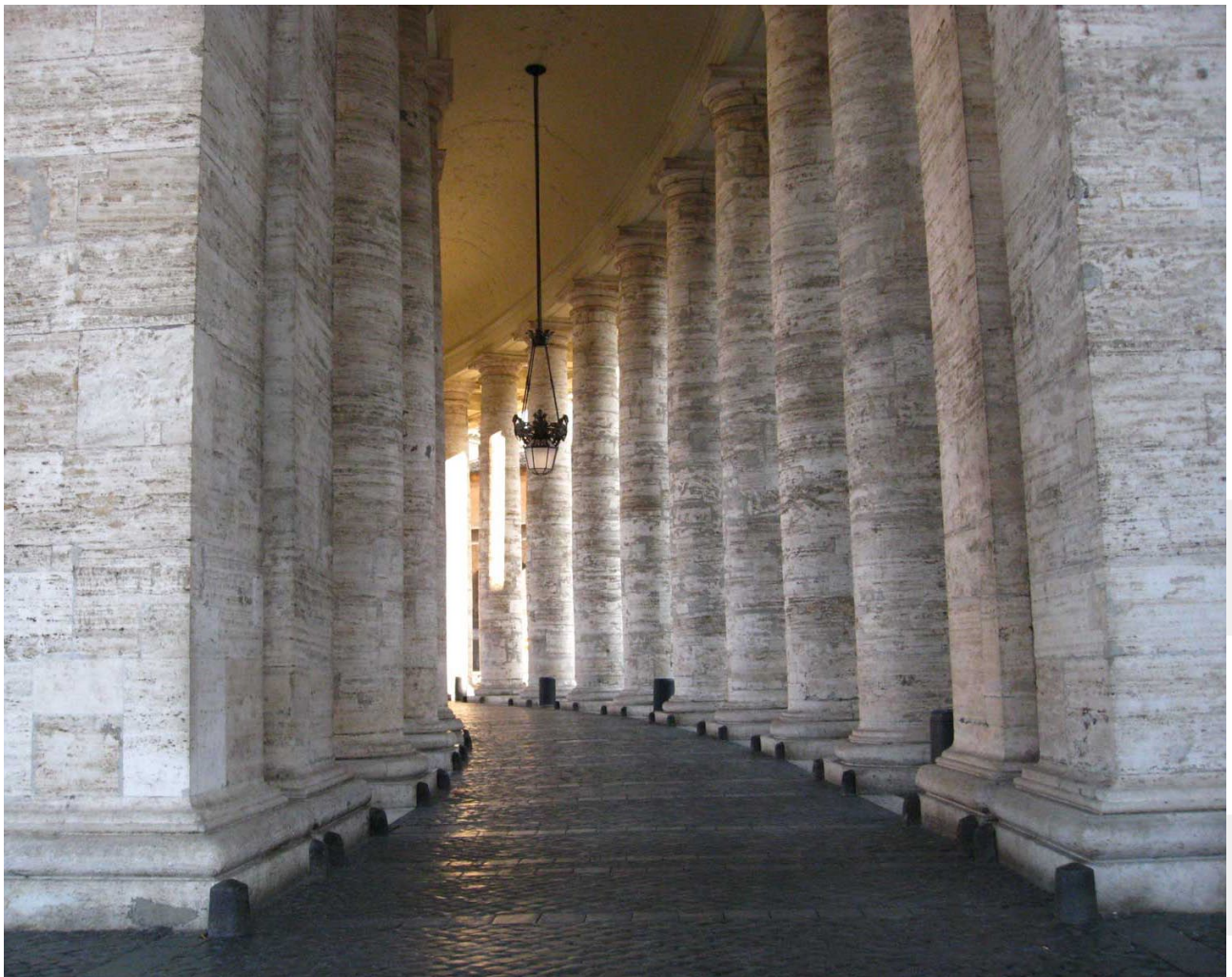
### ○ Columns, Doors, and Windows

The pharaohs and the druids of old were the harbingers of modularity. They understood the need for speed and efficiency when erecting their architectural monuments and took steps to streamline their processes. Quarries and workshops of the ancients were often tasked with creating columns and beams away from the building site until they were ready to be transported and assembled. Creating these elements separately and assembling them at a later time offered a great deal of flexibility as it separated the work being done to specialized groups of craftsman.

Today is no different; many of the world's architectural wonders are feats of engineering ingenuity where assembly lines churn out doors and windows or entire components for a building.

“...many of the world's architectural wonders are feats of engineering ingenuity...”

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*Columns forming Path; David Robert Donatucci*

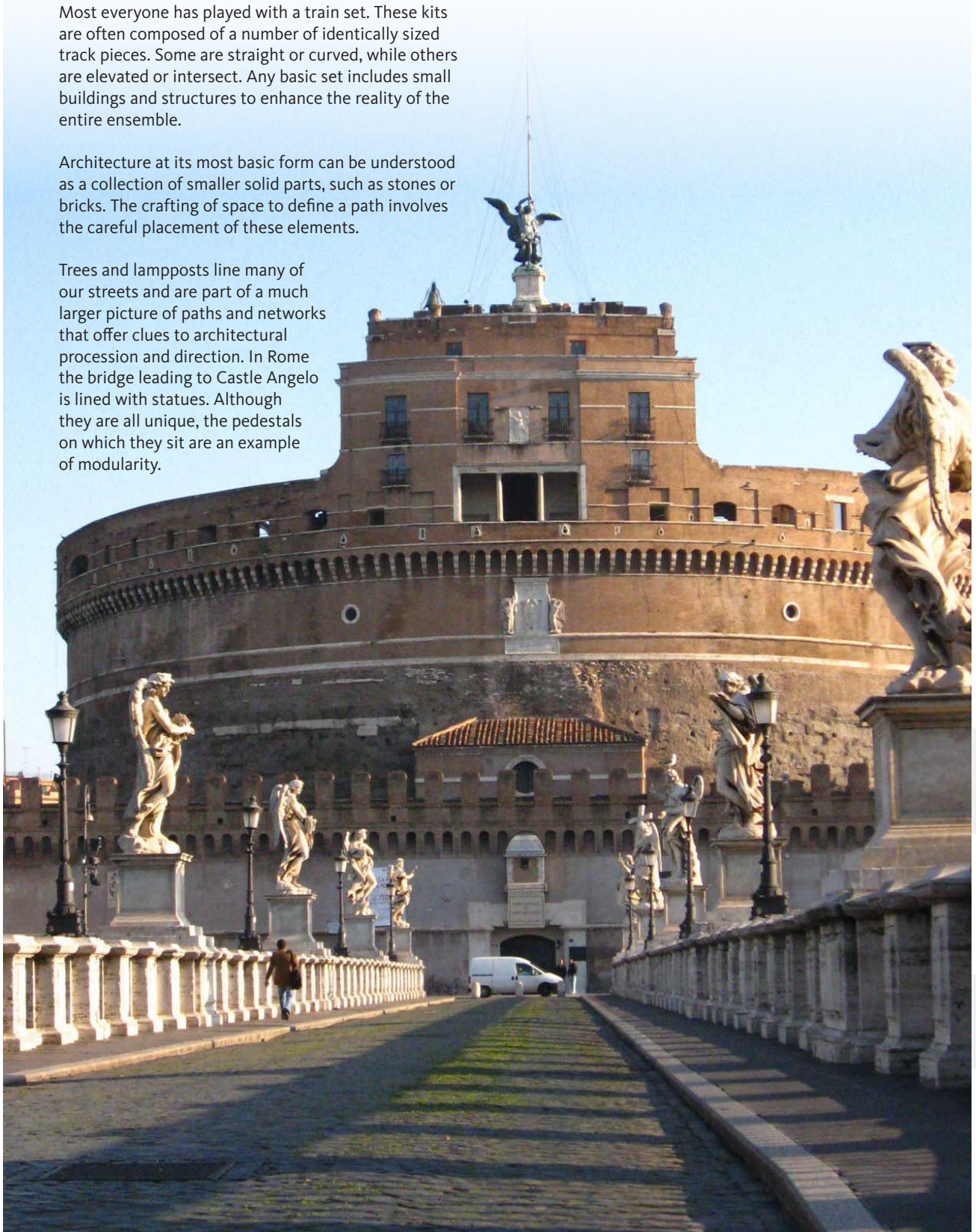


○ Trees, Lampposts, or Statues

Most everyone has played with a train set. These kits are often composed of a number of identically sized track pieces. Some are straight or curved, while others are elevated or intersect. Any basic set includes small buildings and structures to enhance the reality of the entire ensemble.

Architecture at its most basic form can be understood as a collection of smaller solid parts, such as stones or bricks. The crafting of space to define a path involves the careful placement of these elements.

Trees and lampposts line many of our streets and are part of a much larger picture of paths and networks that offer clues to architectural procession and direction. In Rome the bridge leading to Castle Angelo is lined with statues. Although they are all unique, the pedestals on which they sit are an example of modularity.



Bridge to Castle Angelo; David Robert Donatucci

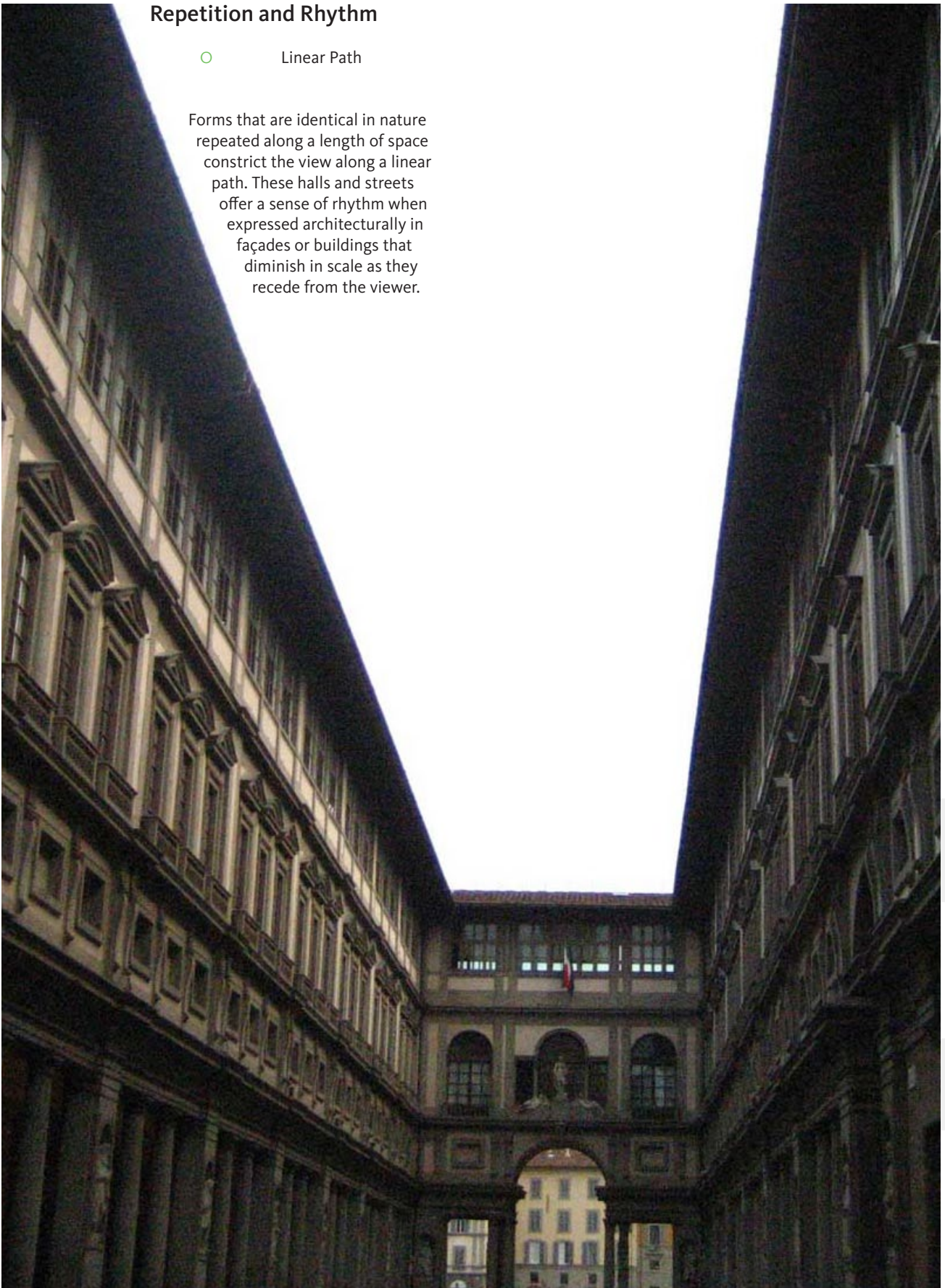


## Repetition and Rhythm



### Linear Path

Forms that are identical in nature repeated along a length of space constrict the view along a linear path. These halls and streets offer a sense of rhythm when expressed architecturally in façades or buildings that diminish in scale as they recede from the viewer.



Uffizi Gallery; David Robert Donatucci



○ Radial Path

The branching of these linear spaces creates what are called radial paths. Examples of this can be found in many cities that involve town squares with streets that radiate and branch out from the core or even in shopping malls that have several routes leading out of a food court. They are also present in outdoor courtyards with a central focus of activity.

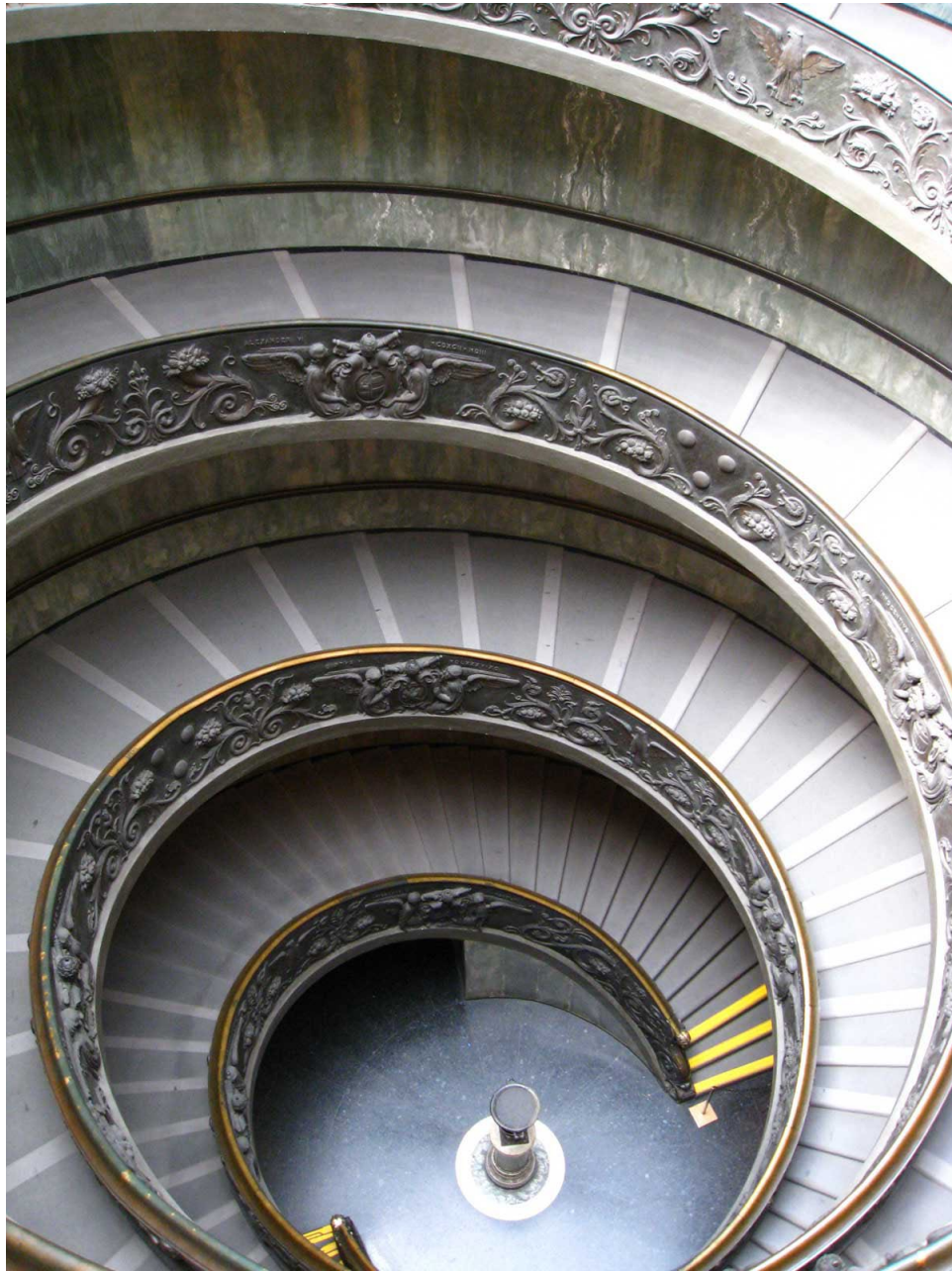


*Path to a Central Pool; David Robert Donatucci*



○ Spiral Path

The spiral path offers a circulation from another edge to a central point in space as with some gardens or a the famed labyrinth however it is most evident in such architectural expressions as a circular staircase or spiraling ramp that connect a lower space to one above



*Vatican Exit; David Robert Donatucci*

## ○ Grid Path

A grid path is one that can be found in such utilitarian spaces as grocery stores or parking garages. The ease at which these paths can be adjusted to accommodate the circulation of people or vehicles by simple food displays or pylons offers the architect opportunities for modular positioning of elements within the grid pattern.

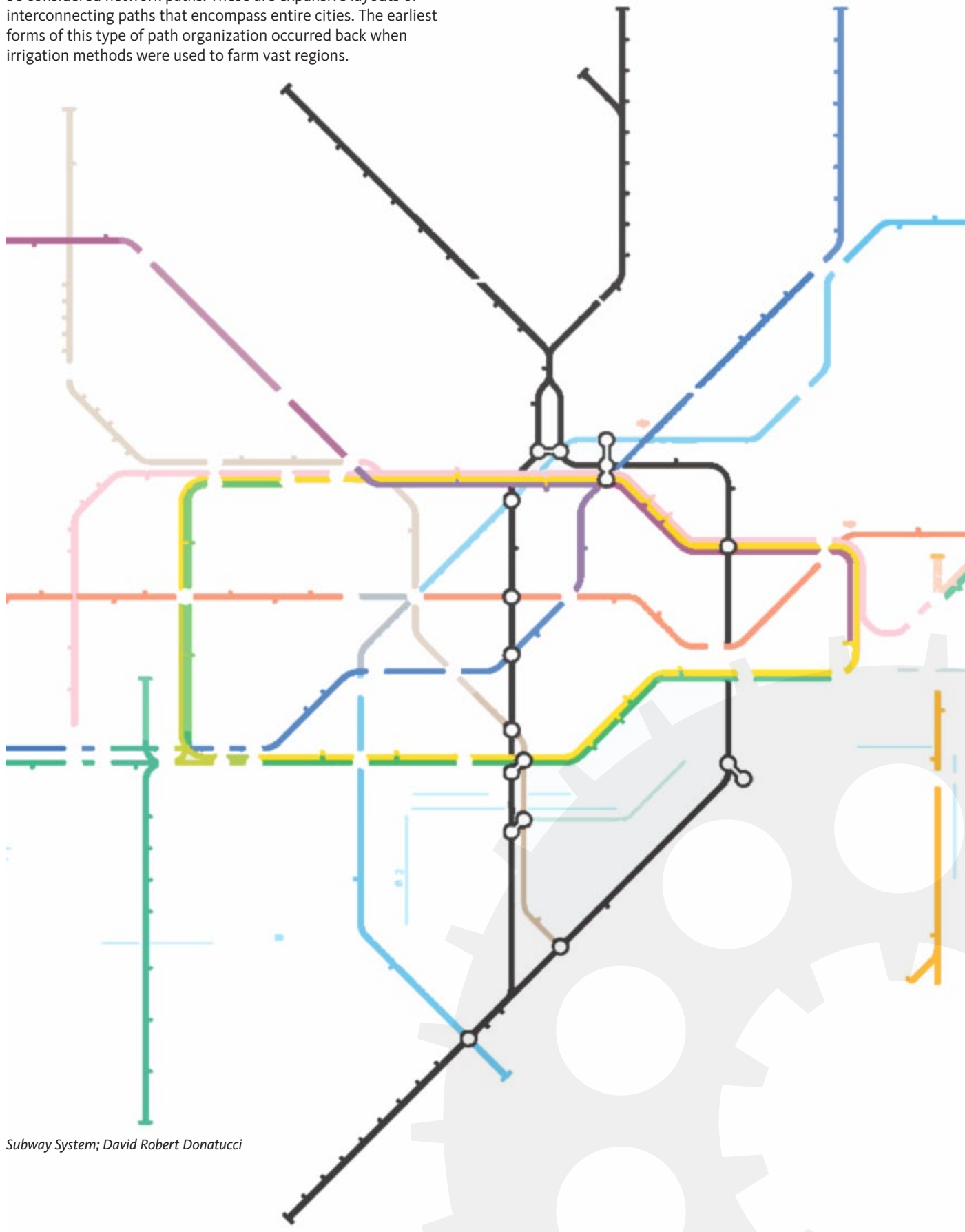


*Vehicle Structure; David Robert Donatucci*



- Network  
(Paris or Rome Plan)

Elaborate systems of paths such as subway lines and canals can be considered network paths. These are expansive layouts of interconnecting paths that encompass entire cities. The earliest forms of this type of path organization occurred back when irrigation methods were used to farm vast regions.

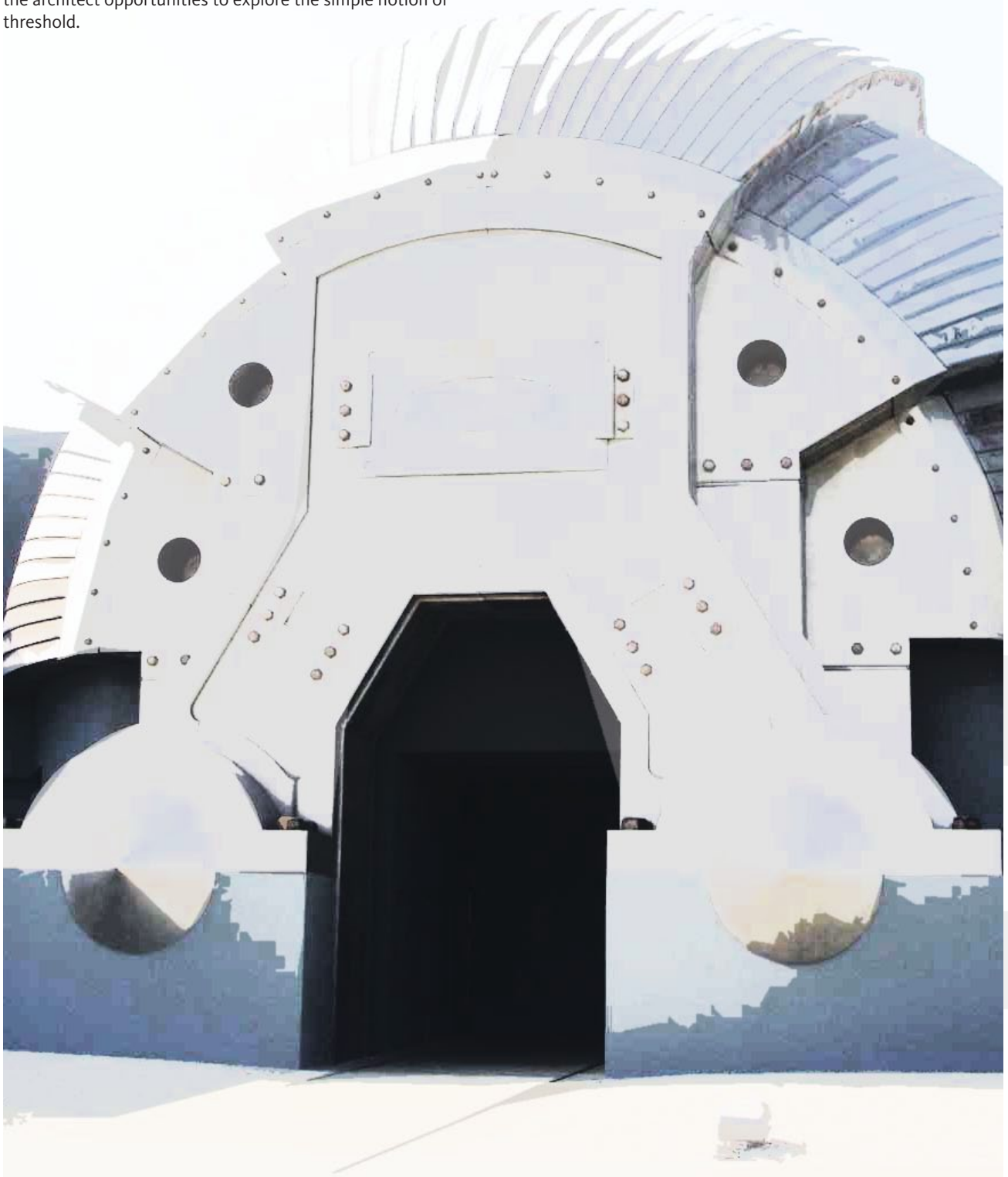


*Subway System; David Robert Donatucci*



## Entrance

Architecture can be experienced in a variety of ways. Often it is admired from a distance as a curious form in the landscape. Sometimes it appears when rounding a corner or emerging from underground or a nearby structure. The manner in which architecture chooses to present itself to passersby often indicates an intention or an invitation to enter. Entrances offer the architect opportunities to explore the simple notion of threshold.



*Factory Entrance; David Robert Donatucci*



The mythological Greek god of thresholds was Hermes. He was the messenger god and traveled from the heavens down to earth and back again to relay messages to humans from the gods. It is no doubt that similar experiences occur in architecture where, upon entering a great temple or cathedral, the aim of architecture was to identify a gateway to sacred space.

The entrance to any building or site is a threshold that simply separates the inside from the outside. Whether this is ceremonial in nature, as in taking shelter under a tree from the rain or a physical opening of a door to a church, the architectural gesture is the same. Entrances are the threshold conditions that define one world and another. The dry patch of land under a tree in the rain is as significant as the patterned marble floor of a church that is washed in stained glass colors of light.

### ○ Approach

Entering any architecture begins with the approach. Sometimes a building sits upon an axis, and the path that leads to the front entrance is in line with the approach. More often, entrances tend to be approached from an oblique angle, such as a store front along a street up ahead.



*Griffith Observatory Entrance; David Robert Donatucci*



## ○ Entrances

Often entrances are celebrated to create a sense of invitation. They are usually made of forms that intrigue visitors or even shelter them from the elements. Entrances can be thought of as portals to another world or space. They can be extremely obvious and deliberate in identifying the point in which to access the structure or they can be the entire façade of a building as with the Paris Opera House that invites crowds of people to enter its world of entertainment. Even the Coliseum supported a series of entrances that were labeled with numbers for the crowds that visited this vast arena.

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*Paris Opera House Entrance; David Robert Donatucci*



## Circulation

The type of travel along any particular path will inform the type of structure it will embody. A simple street through a medieval town is different than one used for ceremonial rituals or vehicular travel. Understanding the type of circulation will inform the proportions and rhythms of the path.



*Medieval Street; David Robert Donatucci*



In Roman times, the Forum provided a grand thoroughfare through the city that brought the returning troops under triumphal arches and ended at the coliseum. The route was punctuated with architecture to accentuate the grandeur of the celebratory march. In a bid to emulate the Romans, Napoleon also staged marches through the city of Paris; however, the chosen path of the Boulevard Champs-Élysées was particularly unique in that it could also be used by protesting mobs. The problem was easily neutralized by Napoleon by staging only a few soldiers at the smaller intersecting streets to contain the masses. Paths can provide an alluring route for celebration—and for protest.

“In a bid to emulate the Romans, Napoleon also staged marches through the city of Paris...”



*Roman Forum; David Robert Donatucci*



*Roman Forum; David Robert Donatucci*



## Stairs and Ramps

Changes in height are wonderful examples of architectural path. The idea of changing levels is one that has resonated with architects since the tower of Babel. Changes in elevation offer different vantage points to the visitor or provide access to varying floors of multileveled structures. These can take the form of a stair or a ramp, for example. Whether they are grand and public to support large volumes of people, or simple fire escapes or service elevators, these architectural elements offer unique opportunities to explore vertical circulation. Even ladders can be elements that help express human scale when viewed in an architectural space.



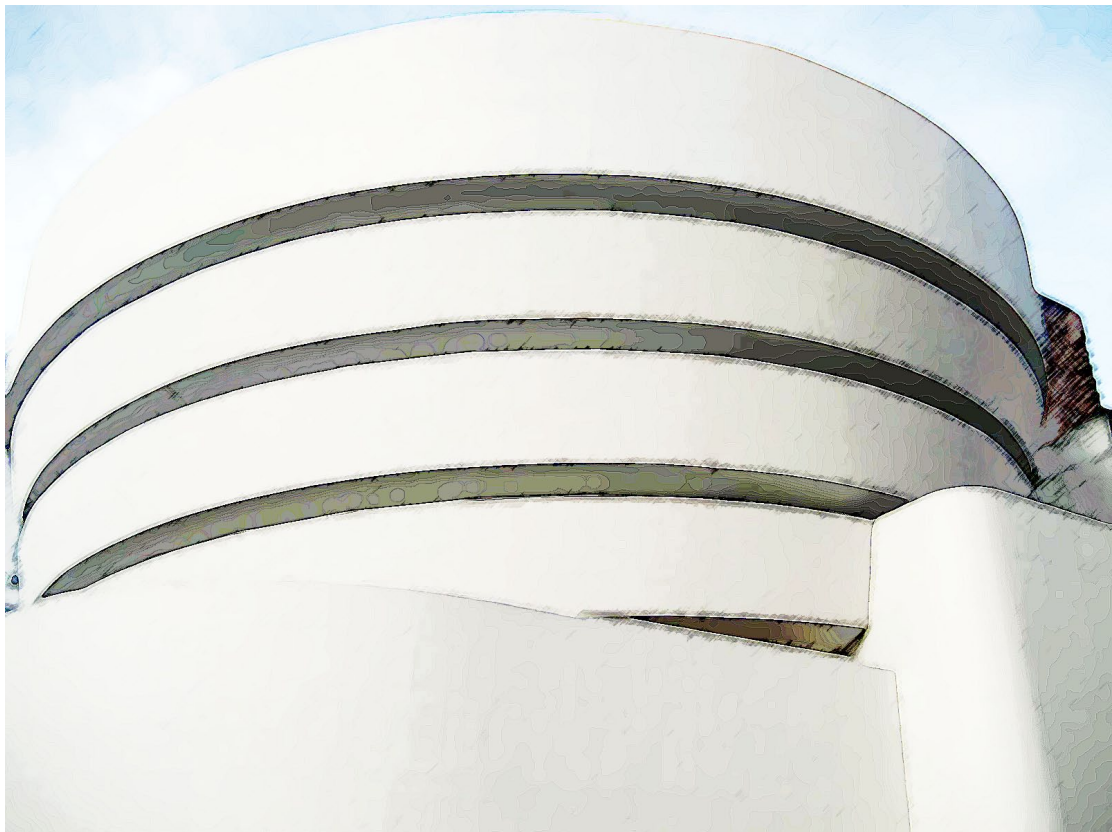
*New York City Fire Escapes; David Robert Donatucci*



The space needed to accommodate a set of stairs differs from that which is needed to support a ramp. This simple notion has been confronted by many architects over the years and has given rise to some spectacular examples of circulation architecture. Whether as seen in the exit ramp of the Vatican museum or in the gallery ramp that surrounds the celebrated space of the Guggenheim Museum in New York, circulation finds a special place in the lexicon of architecture.



*Guggeheim Museum Ramps; David Robert Donatucci*



*Guggeheim Museum Exterior; David Robert Donatucci*