Pompeii: An Introduction
The Geography of Pompeii

- The city of Pompeii is located on the Bay of Naples on a volcanic spur near the River Sarno, about 150 miles to the south of Rome.
- The city is located roughly 6 miles from Mt. Vesuvius, the volcano which catastrophically erupted and buried the city on August 24th, 79 A.D.
- The region of Italy in which Pompeii is located is known as Campania.
- Modern cities nearby include Naples, Sorrento, and Capua.
The Geography of Pompeii
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Plan of the City

A plan of the city. Unexcavated areas appear in blue.
Plan of the City

A more detailed plan of the city with a number of structures labeled.
History of the Region

• Campania was originally inhabited by a group of people known as Samnites, a people who spoke the Oscan language and had inhabited the area since as early as the 8th century B.C.
• Pompeii itself was founded by the Samnites around the 6th century B.C.. The area had previously been used as a port by Greeks and Etruscans, a people from the area to the north of Rome.
History of the Region

• When the area was threatened by a more major incursion by the Etruscans, the city allied itself with the Greeks, who had already begun to colonize the area.
• The Etruscans and Greeks fight over control of the area from 525 B.C. until 474 B.C., when the Greeks win a decisive victory at the naval battle of Cumae.
History of the Region

• The largest of the Greek cities in the region was Neapolis (modern Naples), founded between the 7th and 6th centuries B.C. Other important Greek cities include Cumae and Pithicusae.

• As a result of the alliance between the city of Pompeii and the surrounding Greek colonies (referred to collectively as Magna Graecia), much of the early influence in Pompeian development is Greek. Most of the earliest regions of the city are clearly Greek in design.
History of the Region

• Prior to the control assumed by the Greeks in 474 B.C., Pompeii had been an active trading center, but it begins to decline in importance after the battle of Cumae as trade shifts to the larger cities of Magna Graecia.

• With this decline came a resurgence of the Samnite presence as a large population of Samnite settlers from the Appenines in Central Italy descend from the hills towards the coast. The city remains a largely Samnite settlement until the Romans later become involved in the area.
History of the Region

- This Roman involvement does not really surface until the early 1st century B.C., when Pompeii, along with other Samnite towns in the area, ally themselves against the threat of Roman control of the area.
- Rome had already come to control the majority of Italy after fighting against other native Italic peoples (including the Samnites and Etruscans) as well as against Phoenicians from Carthage for dominance over the peninsula.
History of the Region

• Beginning in 89 B.C., after it becomes apparent that Rome will control the whole of Italy, these allied Campanian cities petition the government of Rome for citizenship.

• The result is the Social Wars, which last from 89 to 80 B.C.

• In 89 B.C., Lucius Cornelius Sulla, a Roman dictator, besieges the city of Pompeii. The resistance is led by Lucius Cluentius, head of the Social League (the Campanian alliance). The resistance is largely successful.
History of the Region

• However, the fate of other Campanian cities is not so positive. In 80 B.C., the nearby city of Nola is successfully besieged, and the Social League is forced to surrender to the troops of Sulla.

• At this point, Sulla establishes a Roman colony at the site of Pompeii, called the Colonia Cornelia Veneria Pompeianorum. Sulla leaves a garrison of 2,000 veteran troops in the city, and the city becomes effectively Roman.
History of the Region

• After the Roman conquest of the region, the city of Pompeii regains its status as a major trading center and becomes wealthy and prosperous. Many of the houses are rebuilt, and a large number of typically Roman civic structures are built, including a Forum for carrying out civic business and Roman entertainment complexes.

• Many of the residents of Pompeii, however, remain Samnites and Greeks.
History of the Region

• The next major event to shape the history of Pompeii is a major earthquake which shakes the region on February 5th, 62 A.D. and causes serious damage to many of the structures.

• As Pompeii is still in the process of rebuilding itself, on August 24th of 79 A.D., Mt. Vesuvius erupts, burying the city and sealing it off until its discovery in 1748.
Vesuvius and Pompeii

- The residents of Pompeii did not know that Vesuvius was an active volcano, or even a volcano at all. The last eruption of Vesuvius had been in the 2nd millennium B.C. and had not been recorded.

- Vesuvius was actually looked upon as a blessing for the area until the catastrophic eruption of 79 A.D. as the volcanic soil was perfect for the cultivation of vines and olive trees, leading wine and olive oil to be among the major commodities produced by the city, leading to its economic vitality.
Vesuvius and Pompeii

Mt. Vesuvius, with the Forum of Pompeii in the foreground
Vesuvius and Pompeii

Vesuvius from the air
Vesuvius and Pompeii

Wall painting of Vesuvius and Bacchus from the House of the Centenary, Pompeii, 1st century A.D.
The Eruption of 79 A.D.

• When Vesuvius erupts in 79, Pompeii is not buried in lava. Rather, the region falls victim to a **pyroclastic flow**, a super-heated avalanche of volcanic gases and debris which comes rushing down the side of the mountain.

• Pyroclastic flows result from the collapse of the large column of ash emitted by volcanoes after their eruption. The column of debris which came from Vesuvius is estimated to have traveled roughly 26 miles into the atmosphere.
The Eruption of 79 A.D.
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• Another term for a pyroclastic flow is a nuée ardente, which in French means “fiery cloud.” This is a more telling description of what unfolded in Pompeii.

• Based on volcanological data, the nuée ardente which resulted from the eruption of Vesuvius came forth from the mouth of the volcano at about 850 degrees Celsius and cooled to a mere 350 degrees Celsius by the time it reached any of the cities around the mountain.
The Eruption of 79 A.D.

• While the nearby city of Herculaneum feels a great deal of this heat, Pompeii, located 6 miles from the mountain, falls victim largely to the poisonous gases which come from the volcano and is buried in about 3 meters of pumice stones called lapilli.

• The city of Pompeii at the time of the eruption was home to between 20,000 and 25,000 residents, though only about 1,150 bodies have been found in the city, suggesting that residents had enough time to flee the city between the time of the initial explosion and the burial of the city.
The Eruption of 79 A.D.

- The deaths of the residents who did not flee Pompeii was not a quick and scorching death by fire, but rather a slow and agonizing death as the poisonous gases from the volcano or a quick death by means of debris fall.
- Of the bodies found at Pompeii, 38 percent were found in ash deposits, many inside buildings, suggesting that their cause of death was roof collapse or debris fall.
The Eruption of 79 A.D.

• The remaining 62 percent of the bodies were found in pyroclastic flow deposits, suggesting that their cause of death was likely suffocation or debris fall. Most of these bodies were found outside of buildings.

• These bodies were encased in volcanic material, and over the centuries, decomposed, leading to the formation of body-shaped cavities in the volcanic deposits.
The Eruption of 79 A.D.

• Upon discovery of such deposits, archaeologists filled these cavities with plaster, leading to the production of casts of the bodies in their dying poses. Most of these poses suggest the agonizing last moments of the residents of Pompeii, poses consistent with slow suffocation.

• This stands in contrast to the residents of Herculaneum, whose skeletons suggest a quick death by excessive heat. Such a death is confirmed by evidence of carbonized bones, exploded teeth, and brains boiled within their skulls.
The Eruption of 79 A.D.

The victims of Vesuvius at Pompeii
The Eruption of 79 A.D.

The victims of Vesuvius at Pompeii
A First-Hand Account

• The sights and sounds of the eruption are recorded in a letter of Pliny the Younger, nephew of Pliny the Elder, who described several of the Wonders of the Ancient World.

• The younger Pliny describes the final hours of his uncle, then admiral of the Roman navy at Misenum, who went on a rescue/exploration mission near the volcano. The younger Pliny himself stayed at home to read his Vergil, though his uncle offered to take him along. As a result of this seemingly cowardly decision, a first-hand account of the eruption survives:
A First-Hand Account

• Some of Pliny’s letter:
  – “My dear Tacitus,
      You ask me to write you something about the death of my uncle so that the account you transmit to posterity is as reliable as possible. I am grateful to you, for I see that his death will be remembered forever if you write about it. He perished in a devastation of the loveliest of lands, in a memorable disaster shared by peoples and cities, but this will be a kind of eternal life for him…”
A First-Hand Account

• Pliny’s letter, continued:
  “…He was at Misenum in his capacity as commander of the fleet on the 24th of August, when between 2 and 3 in the afternoon my mother drew his attention to a cloud of unusual size and appearance. He had had a sunbath, then a cold bath, and was reclining after dinner with his books. He called for his shoes and climbed up to where he could get the best view of the phenomenon. The cloud was rising from a mountain, at such a distance we couldn't tell which, but afterwards learned that it was Vesuvius. I can best describe its shape by likening it to a pine tree. It rose into the sky on a very long "trunk" from which spread some ‘branches…”"
A First-Hand Account

• Pliny’s letter, continued:
  “…I imagine it had been raised by a sudden blast, which then weakened, leaving the cloud unsupported so that its own weight caused it to spread sideways. Some of the cloud was white, in other parts there were dark patches of dirt and ash. The sight of it made the scientist in my uncle determined to see it from closer at hand.

  He ordered a boat made ready. He offered me the opportunity of going along, but I preferred to study—he himself happened to have set me a writing exercise…”
Pliny’s letter, continued:

“...Ash was falling onto the ships now, darker and denser the closer they went. Now it was bits of pumice, and rocks that were blackened and burned and shattered by the fire. Now the sea is shoal; debris from the mountain blocks the shore. He paused for a moment wondering whether to turn back as the helmsman urged him. "Fortune helps the brave," he said, "Head for Pomponianus."

At Stabiae, on the other side of the bay formed by the gradually curving shore, Pomponianus had loaded up his ships even before the danger arrived, though it was visible and indeed extremely close, once it intensified...”
A First-Hand Account

• Pliny’s letter, continued:
  “...He planned to put out as soon as the contrary wind let up. That very wind carried my uncle right in, and he embraced the frightened man and gave him comfort and courage. In order to lessen the other's fear by showing his own unconcern he asked to be taken to the baths. He bathed and dined, carefree or at least appearing so (which is equally impressive). Meanwhile, broad sheets of flame were lighting up many parts of Vesuvius; their light and brightness were the more vivid for the darkness of the night...”
A First-Hand Account

• Pliny’s letter, continued:
  “…To alleviate people's fears my uncle claimed that the flames came from the deserted homes of farmers who had left in a panic with the hearth fires still alight. Then he rested, and gave every indication of actually sleeping; people who passed by his door heard his snores, which were rather resonant since he was a heavy man. The ground outside his room rose so high with the mixture of ash and stones that if he had spent any more time there escape would have been impossible…The buildings were being rocked by a series of strong tremors, and appeared to have come loose from their foundations and to be sliding this way and that…”
A First-Hand Account

• Pliny’s letter, continued:
  “…Outside, however, there was danger from the rocks that were coming down, light and scorched as these bits of pumice were. Weighing the relative dangers they chose the outdoors; in my uncle's case it was a rational decision, others just chose the alternative that frightened them the least.

  They tied pillows on top of their heads as protection against the shower of rock. It was daylight now elsewhere in the world, but there the darkness was darker and thicker than any night. But they had torches and other lights. They decided to go down to the shore, to see from close up if anything was possible by sea…”
A First-Hand Account

• Pliny’s letter, continued:
  “…But it remained as rough and uncooperative as before. Resting in the shade of a sail he drank once or twice from the cold water he had asked for. Then came an smell of sulfur, announcing the flames, and the flames themselves, sending others into flight but reviving him. Supported by two small slaves he stood up, and immediately collapsed. As I understand it, his breathing was obstructed by the dust-laden air, and his innards, which were never strong and often blocked or upset, simply shut down. When daylight came again 2 days after he died, his body was found untouched, unharmed, in the clothing that he had had on. He looked more asleep than dead…” – Pliny the Younger, Epistulae 6.16
A First-Hand Account

• Pliny’s account of the eruption has been beneficial to volcanologists, and along with geological data, has allowed for an accurate historical/scientific reconstruction of the events of August 24\textsuperscript{th}, 79 A.D.
• Eruptions of the type described in Pliny’s letters have since been termed “Plinian Eruptions.”
• Geologically, Vesuvius is expected to experience a Plinian Eruption roughly every 2,000 years.
Excavation of Pompeii

• The site of Pompeii is first discovered in 1599 by the Italian architect Fontana while digging a new course for the River Sarno, though the ruins are quickly forgotten. They are rediscovered in 1748, and King Charles VII of the Two Sicilies (later the King of Spain) takes a great interest and begins digging.

• In 1860, more formal excavation begins under Giuseppe Fiorelli. Since then, excavation has been undertaken by the Italian government under the direction of the Soprintendenza Archaeologica di Pompeii.
Vesuvius in Later Years

• Vesuvius has erupted nearly 3 dozen times since 79 A.D., though never as catastrophically.
• Most recently, the volcano erupted non-stop between the years of 1913 and 1944, steadily producing lava flows that covered several towns, most notably San Sebastiano. The lava flows progressed slowly enough to allow a great deal of time for evacuation, much unlike in 79 A.D.
Vesuvius and the Bay of Naples Today

- The area around Mt. Vesuvius today is home to roughly 3 million people, roughly 1 million of whom live in the so-called “Red Zone,” the area which would be destroyed by an eruption of the same magnitude as that of 79 A.D.

- The current evacuation plan involves the movement of over 700,000 people in a period of less than a week along with a 2-week advance warning of an upcoming eruption.
Vesuvius and the Bay of Naples Today

The area around Naples today is a metropolis of roughly 3 million.
Vesuvius and the Bay of Naples Today

A map of the roads around Vesuvius today
Vesuvius and the Bay of Naples Today

• With Vesuvius threatening to erupt again at any time, is modern Naples ready?
• The Italian government is offering citizens incentives to leave the area, but these are not economically viable.
• When Vesuvius erupts again, the potential for a repeat of 79 A.D. is enormously high.
• History has a way of repeating itself.