

Volcanoes are ruptures in the Earth's (or another celestial body's) crust that allow volcanic ash, hot lava and gases to escape. There are approximately 1,500 volcanoes worldwide and they are generally found dispersed amongst tectonic plates. It is irrefutable to deny that these natural phenomena have stupendous powers - but to what actual extent are volcanoes physically and socially impactful?

The heat, volcanic ash and pumice from the eruption of Mount Vesuvius in 79 AD had the ability to trap and preserve the ancient city of Pompeii into an exceptionally detailed frozen snapshot in time. This in turn has provided the unique possibility of widening one's knowledge of bygone traditions and cultures. By virtue of an abundance of preserved legal documents, historians are now able to compare societies' priorities and thus understand that the Romans were a society 'governed by documents', mirroring the law systems of some countries today. Furthermore, numerous artefacts from the eruption were traded by Victorians, so the ancient eruption also had power thousands of years later to allow affluent aristocrats to vaunt their wealth so they could gain further respect from the public.

Additionally, there is a paradoxical interrelationship of destruction and preservation that needs to be further explored, and it is undeniable that volcanic activity has brought light to these matters. Volcanic eruptions have the power to incite different psychological perspectives on whether the mass destruction was worth the knowledge gained from the aftermath. People are forced to consider whether to leave the mass historical graveyard of Pompeii in peace or whether to dig up the ruins. Although it meant the inordinate sacrifice of countless lives, the eruption allowed authors such as Pliny to be eminent even in current literature. Furthermore, copious exquisite artefacts have been found and lucrative tourist destinations with numerous job opportunities have opened due to the disaster. Therefore, some of the knowledge gained from the destruction was not futile. However, it is imperative to remember that this was at the large price of the destruction from Mt Vesuvius that had the immense physical power to release a deadly cloud of scorching tephra and gases to a towering height of 21 miles, as well as ejecting molten rock, pumice and hot ash at 1.5 million tons per second, ultimately releasing 100,000 times the thermal energy of the Hiroshima-Nagasaki bombings. The prodigious physical power of volcanoes also can be exploited by humans as they can be used as weapons. However, they are also capable of allowing humanity to prepare for conflict. For instance, in the US, volcanic eruptions were used to study the ways that populations might respond to nuclear bombings as it is undeniable that volcanoes have the power to bring immeasurable amounts of terror.

Withal, volcanoes have also started military conflicts. The eruption of an Icelandic volcano in 1783 is believed to have been a substantial cause of the French Revolution as the ash cloud led to poor harvest in France and that, in turn, led to even more public unrest. However, volcanoes don't just have the power to terrorize, but they also have a power that makes people want to live around them because they can give life as well as take life. For instance, they can help harvests as volcanic soils are rich in certain minerals such as iron, magnesium and potassium, thus allowing coffee crops to flourish. Volcanic landscapes also offer diverse and distinctive ecosystems. They are home to organisms that occur only in places with association to volcanic activity, such as thermophiles. Instead of relying on photosynthesis, thermophiles use energy from the earth's core. There are whole communities of organisms based around this source of energy, and several biologists believe that life began in this way, with photosynthesis evolving later. Therefore, volcanoes also allow researchers to understand the possible beginnings of life.

In addition, volcanoes can cause much damage as to even cause mass extinctions. Many catastrophic events have been discovered to coincide in times with immense volcanic action and it is a belief that

the extinction of dinosaurs could be due to volcanic activity. Alternatively, the volcanoes could also have brought a blessing as if dinosaurs had not been wiped out, there is little chance that humans would have existed or evolved to what they are today. From this, volcanoes can be seen as both a curse and a blessing to humanity.

Moreover, not only do some volcanoes have cultural significance (e.g. Mt. Fuji which represents part of Japan's identity), but they also have the power to inspire people. Numerous artworks influenced by volcanoes have the ability to communicate concepts in a form that human dialogue cannot, such as the true power of nature and how it diminishes humans. The earliest paintings of volcanic eruptions further pose the moral question as to whether it is right to stay back and simply accept the fate of those in danger or whether to risk your own life to help them. Volcanoes stimulate people to explore their natural instincts and it opens questions that need to be answered, because even in 2020, many choose to film oppression and violence from afar, and do nothing to help the victims.

To conclude, one cannot deny the extensive power of volcanoes. Not only are they unpredictable geological architects that are life-altering and cause world changing events that can affect everything and everyone, but they are also philosophers, coercing society to prepare answers to prominent questions that could be pertinent in the future or are even relevant currently during this coronavirus pandemic, such as whether it is okay to ever value money over a life.