

Oliver Lubrich

UNIVERSITY OF BERN
e-mail: oliver.lubrich@unibe.ch
 <https://orcid.org/0000-0002-0606-9493>

Thomas Nehrlich

UNIVERSITY OF BERN
e-mail: thomas.nehrlich@unibe.ch
 <https://orcid.org/0000-0002-7086-3659>

The Aesthetics and Politics of Volcanoes: William Hamilton's *Campi Phlegraei*

Abstract

William Hamilton (1730–1803) was one of the foremost volcanologists of his time, renowned for his scientific contributions as well as his glamorous life. Born into British aristocracy, he served as a diplomat in Naples, where he climbed Vesuvius over 50 times and witnessed numerous eruptions. His observations culminated in the publication of *Campi Phlegraei* (1776/1779), which, at the time, was the most accurate account of the Phlegraean Fields in Campania, now recognized as one of the largest supervolcanoes on Earth. Hamilton was married to the much younger Lady Emma, who became the lover of Admiral Nelson, the subject of various movies as well as Susan Sontag's novel *The Volcano Lover*. He collected ancient artifacts and captivated visitors such as Goethe with his passion for antiquity. Most importantly, his geological expeditions uncovered the volcanic origins of southern Italy, highlighting the dual nature of seismic activity – both destructive and essential for the region's fertility. His vivid accounts illustrate the forces of nature, laying foundational insights for modern geology. *Campi Phlegraei*, illustrated by Pietro Fabris, combines scientific precision with artistic flair, capturing the pleasant landscapes and perilous eruptions around Naples while pioneering the aesthetics of nature writing. Set against the backdrop of political unrest and the “eruption”

of the French Revolution, Hamilton's reports also reflect the sociopolitical climate of his time. Inspiring writers and artists, his legacy continues to resonate. It offers a historical perspective on today's environmental challenges and contemporary discourses on climate change and disaster management.

Key words: geology, volcanology, Phlegraean Fields, aesthetics, rhetoric, politics, nature writing

Parole chiave: geologia, vulcanologia, Campi Flegrei, estetica, retorica, politica, scrittura della natura

Nature acts slowly, it is difficult to catch her in the fact.

William Hamilton, *Campi Phlegraei* (1776)

Wir hatten nun einen Text vor uns,
welchen Jahrtausende zu kommentieren nicht hinreichen.

[We now had a text before us,
which millennia would not suffice to comment on.]

Johann Wolfgang von Goethe
contemplating Mount Vesuvius,
Italienische Reise (1829)

Anyone who opens the opulent volumes of *Campi Phlegraei* (1776, 1779) by William Hamilton (1730–1803) encounters a variety of information already on the abundant title page (see Fig. 1). Volcanoes, royal majesties and paintings – these key words are promising. They arouse curiosity. Historically, the texts and details on a title page were characteristically diverse. Today, however, with the distance of almost two and a half centuries, they require an explanation – like much about this unusual book and its extravagant author.

Campi Phlegraei appeared in two volumes in 1776, followed by a supplementary volume in 1779. The title refers to the Phlegraean Fields, a rugged area of high volcanic activity around Naples, which is now known to contain one of the most powerful magma chambers on earth. The fact that Hamilton chose a Latin title is significant in several ways. Latin was still common as a language of science at the time, especially in descriptive natural history. The author, however, wrote the text of his book in English and complemented it with a French translation for a wider international audience. The Latin title, moreover, refers to the most famous volcano text in literary history, the letters of the Roman writer Pliny the Younger, in which he describes the violent eruption of Mount Vesuvius in the year 79 of the Common

Era (Plinius 2010: 408–417 (annotations: 876), 422–431 (annotations: 876–877)). It not only killed his uncle, the naturalist Pliny the Elder, but also devastated entire cities and landscapes in the surrounding area. The extent of the catastrophe can still be seen today in the excavations of Pompeii and Herculaneum, which were buried by volcanic ashes, gases and rocks and whose population almost completely died.

Actually, the title *Campi Phlegraei* is not only Latin (*campus*, ‘the field’), but also Greek (*phlégein*, ‘to burn’). It contains two layers of European as well as local cultural history, since southern Italy had been colonized by the Greeks. Thus it hints at Hamilton’s enthusiasm for antiquity, evidenced by his large collections of Greek and Etruscan vases and other archaeological objects.

Vesuvius, whose eruption destroyed Pompeii and Herculaneum, is one of those “volcanos” that, according to the title page (see Fig. 1), form the subject of the work. After long periods of rest, it became active again in the second half of the 18th century. During this phase of reawakened, intense activity, hardly a year passed without a new eruption, which could have had disastrous consequences for the surrounding areas and their inhabitants. In addition to Vesuvius, Hamilton’s *Campi* also deals with Etna and Stromboli, two other fire mountains of the then Kingdom of the Two Sicilies.

In Naples, at the court of King Ferdinand IV, Hamilton served as a diplomat, namely as “Envoy Extraordinary, and Plenipotentiary” of the English king. This prestigious and influential position between two highnesses, “His Britannic Majesty” and “The Court of Naples,” is mentioned by Hamilton with as much self-confidence as his noble title “Sir” – clear indications of his elevated social position and his privileges as a wealthy member of an aristocratic upper class. When his book was published, the absolutist social order in Europe had not yet been shaken by the French Revolution. But the revolution already seemed to announce itself metaphorically in the eruptions of the volcanoes that Hamilton depicted.

Social rank, however, was not the only authority with which Hamilton introduced himself to his readers. In fact, he proudly pointed out that he had already sent a number of nature reports about the *Campi Phlegraei* to the Royal Society, the most important scientific association of the time in Britain (“As They have been communicated to the Royal Society of London”). Over the years, they had been published in the *Philosophical Transactions*, one of the world’s leading scientific journals (Hamilton 1767, 1768, 1769, 1770, 1771a, 1771b, 1773, 1778a, 1778b, 1780, 1783, 1786, 1795). Hamilton was not only an aristocrat, but also a scholar.

This double authorization as a nobleman and as a researcher is subtly expressed in the enigmatic row of letters in the middle of the title page, below the author’s name: the combined abbreviation “K. B. F. R. S.” stands for two different affiliations: “Knight of the Order of the Bath” (K. B.) and “Fellow of the Royal Society” (F. R. S.). Hamilton unites two social orders that seem incompatible to us today:

pre-Enlightenment feudalism and modern academic knowledge. His whole personality is based on this paradox.

The scientific ambition is expressed on the title page of *Campi Phlegraei* through various elements. The first word of the subtitle, “Observations,” already contains a whole program: In his eye-witness accounts, the author sets himself apart from speculative natural philosophy, from study-room erudition, and from armchair travelers. He pleads for empirical field research, which produces knowledge from immediate exposure *in situ* and experience in the face of its natural objects.

To convey his experiences on the ground – in sulfur-smelling craters and on glowing lava, but also in lush vineyards and on picturesque Mediterranean bays – to a wide audience, Hamilton employs not only texts but also pictures. In addition to his nature reports, his book consists of an “accurate Map” and, above all, of colored “plates” that illustrate his descriptions. Based on “precise” sketches from the field, they are “illuminated from Drawings taken and coulour’d after Nature,” as the title page suggests.

These illustrations largely contribute to the appeal of the book. And they point to another important aspect of the title page: authorship, or co-authorship. While Hamilton is the “Author” of the texts, the illustrations were made by the English-Italian artist Pietro Fabris, who is also named as the “Editor” of the work. The book was thus produced not only in connection with a scientific community in London, but also with interdisciplinary cooperation on site in Naples.

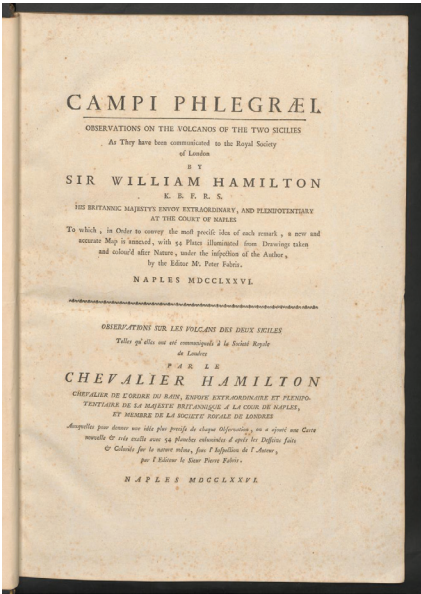


Fig. 1. The title page of the first of volume of Hamilton's *Campi Phlegraei* (1776)

Hamilton and Goethe

Hamilton gained literary significance through his encounter with Goethe, who visited him several times in his villa during the famous trip to Italy in 1787 (Goethe 1991–1999: 199–211, 220–222, 225–226, 228–229, 231–234, 314–316, 353–355, 365–370). The chemist Otto Krätz has pointed out how astonishing it is that there are no traces of a scientific exchange between them (Krätz 1986, 1987: 134–140). After all, Goethe, who climbed Vesuvius three times, met in Hamilton the most experienced volcanologist of his time and the most precise geological expert of the region. Goethe, however, was a “Neptunist” in questions of geological history, in line with his teacher and the most prominent representative of this doctrine, the Freiberg mineralogist Abraham Gottlob Werner (1749–1817). Hamilton, on the other hand, represented the opposite (and more modern) position as a “Plutonist.” They were thus on different sides of a scientific debate. The Neptunists assumed that the mainland of the Earth had gradually formed by sedimentation from a sinking primordial ocean. The Plutonists, on the other hand, considered volcanic activity to be the driving force that shaped the surface of the planet from the Earth’s interior.

Goethe remained inclined to the Neptunist theory throughout his life, even after he had exchanged views on geological matters with Alexander von Humboldt decades later and had read his groundbreaking study “Über den Bau und die Wirkungsart der Vulkane in verschiedenen Erdstrichen” [On the structure and activity of volcanoes in different parts of the world] (Humboldt 1823: 49–54). In *Faust II* (1832), Goethe took up the geological debate between the two parties. In the second act, he stages it as an argument between Anaxagoras and Thales, who hold Neptunist and Plutonist views, respectively. And he has Mephisto tell his diabolical version of the formation of the Earth in the fourth act.

The Formation of the Earth

For a long time, volcanoes were a mystery. Even in Hamilton’s time, from today’s perspective, quite erroneous assumptions prevailed. According to ancient mythology, volcanoes were regarded as openings to Hades. Similarly, the oracle of the Sibyl of Cumae, not far from Vesuvius, which Hamilton also mentions, as well as the oracle of Delphi, are today attributed to volcanic gases. According to Christian doctrine, volcanoes were seen as warnings of hell. Geologically, they challenged the biblical worldview, which extends from Genesis through the Flood to the Apocalypse

but is unable to explain the long-time history of the Earth, for the duration of which more and more empirical evidence was found in Hamilton's time.

The controversy between Neptunists and Plutonists, which Hamilton and Goethe apparently refrained from settling when they met, played an important role in the scientific history of volcanoes in the late 18th and early 19th centuries. As a result of this debate, a geological paradigm shift occurred – before the discovery of plate tectonics. Crucially, nothing less was at stake than the question of the origin of the Earth. Hamilton's work contributed to the assertion of the Plutonistic view. The surface of the Earth develops largely through eruptions from its interior. To observe and to document them, Hamilton created volcanic chronicles and geological records, he described eruptions and had them recorded in drawings. Although he was not formally trained in natural history or even geology, he was so thorough that experts still today recognize his descriptions as accurate documentation of the terrain. The fact that Hamilton dispensed with measuring instruments and other means of exact data collection does not contradict this finding. His measurements may not have been absolutely precise sometimes, but he relied on the human senses and his empirical skills to perceive what was important, for example, the stratification of rocks and the course of eruptions. For chemical-mineralogical analyses, Hamilton sent samples to the Royal Society, which had the necessary equipment.

Hamilton's trust in his own sensory perception as a means of knowledge was based on empiricism as a method of Enlightenment research. Only that which can be observed, comprehended, and proven, could be valid. His restriction to empirical observations was the result of a deep skepticism against speculations and fictions, against what Hamilton calls "systems" in the introductory letter of *Campi Phlegraei*: "It is to be lamented, that those who have wrote most, on the subject of Natural History, have seldom been themselves the observers, and have too readily taken for granted sistems [sic], which other ingenious and learned men, have perhaps formed in their closets, with as little foundation of self experience: the more such systems may have been treated with ingenuity, the more have they served to mislead, and heap error upon error. Accurate and faithfull observations on the operations of nature, related with simplicity and truth, are not to be met with often [...]" (Hamilton 1776: 5). Hamilton wished to refrain from dogmatic systems and to convey only verifiable facts: "Aware of the danger of systems, I have kept clear of them, and have confined my self to the simple narrative of what I have remarked myself, and the truth of which may be easily ascertained, by visiting the curious spots I have pointed out in the general map" (Hamilton 1776: 6). It was only on the basis of confirmed knowledge that comprehensive theories were to be established, for which Hamilton intended his own field research to provide the empirical substance and groundwork: "By having then, if I may be allowed the expression, anatomized so considerable a tract of land, and given the most exact representation of

each minute part of which it is composed, and proved, as I think, beyond a doubt, the Volcanick origin of the whole, I can but flatter myself, that such hints as I have given, may be improved and lead to further discoveries of the same nature, and lend much assistance towards the forming a better Theory of the Earth than has hitherto appeared” (Hamilton 1776: 11–12).

For Hamilton, this methodology corresponded to a specific poetics. His descriptions aimed at a sober recording of facts, as he explains in his concluding letter to Joseph Banks in the supplementary volume: “As many Poetical descriptions of this eruption will not be wanting, I shall confine mine to simple matter of fact, in plain prose, and endeavor to convey to you, Sir, as clearly, and distinctly, as I am able, what I saw myself, and the impression it made upon me at the time, without aiming in the least at a flowery stile” (Hamilton 1779: 5). It is no coincidence that with the descriptive ideal “clearly, and distinctly” Hamilton ties in with Descartes’s criteria of *clair et distinct*, with which the latter had co-founded modern science.

With the help of his precise observations and his evidence-based conclusions, Hamilton made geological and volcanological discoveries: He recognized that volcanoes change the landscape and produce mountains, especially in areas of increased volcanic activity, such as the Phlegraean Fields, and that their age and history can be traced by their ejections. Even inactive volcanoes can be identified by traces of their past eruptions. Many volcanoes have similar features: the cone shape, the crater with a hill in it, lateral outlets of lava, weathering by vegetation and lake formation in the eroded crater, a gradual breaking off of the flanks in extinct volcanoes, etc. Based on the amount of ejected material and against widespread assumptions, Hamilton determined that the combustion chamber of a volcano does not sit at its top and derive from coal deposits beneath the surface, but actually lies deep below the mountain and is fueled by underground fires, possibly interconnected over long distances, forming chains of fire mountains. Last but not least, Hamilton was able to describe recurring elements of volcanic activity based on the multiple eruptions he witnessed, such as the rhythmic alternation between ejection and quiescent phases or the mineralogical composition of the erupting lavas and rocks. Using signals such as quakes, ground thunder, and gas emissions, he tried to infer patterns for predicting eruptions.

Hamilton made a seminal contribution to the history of science. By studying the course of successive volcanic eruptions and recording their chronology from their traces, he added a temporal dimension to geology – and thus contributed to a general trend of temporalization in the sciences around 1800: The concept of time entered natural history. As in paleontology and later in biology with Charles Darwin’s theory of evolution, geology developed an awareness of the historical variability of nature and of a prehistoric, prehuman *deep time*. This extensive temporal concept clearly contradicted the Judeo-Christian myth of creation and the naive assumption that the Earth was only a few thousand years old.

Hamilton recognized that nature evolved slowly, despite the dramatic catastrophes he observed in the eruption of volcanoes. He thus took a mediating position in a wider debate on natural history that was to continue into the middle of the 19th century. The followers of so-called catastrophism, as represented by the French naturalist Georges de Cuvier (1769–1832), assumed that the history of the universe, our earth, and all living beings was determined by disruptive events. They held floods, meteorites, earthquakes and eruptions responsible for the shape of the Earth, the development of life, but also for mass extinction. The opposite position is represented by so-called uniformitarianism (also “gradualism”), conceived by the British geologists James Hutton (1726–1797) and Charles Lyell (1797–1875) (Hutton 1788: 209–304, Lyell 1830–1833, Lyell 1863). According to this principle the geological processes on earth run uniformly and slowly. Even major upheavals result from the interaction of many small changes.

Today we know that both models have their justification. Catastrophic and gradual processes in nature interact. Hamilton, too, considered both punctual eruptions and incremental developments in his explanations of earth’s history. The scale of his geological chronology was formed by the abrupt ejections that covered Pompeii, as well as by the deposits of earth that gradually accumulated above them. The interval between the eruptions could be measured by their thickness. The history of the Earth could be read from their layers.

The picture plates in *Campi Phlegraei* illustrate Hamilton’s theory of the volcanic origin of the Phlegraeian Fields and thereby of the whole region around Naples. In addition to active Vesuvius, they show extinct volcanoes, weathered craters, volcanic islands and crater lakes, solidified lava flows, and rock layers that formed in prehistoric times. The geological purpose of his work is most clearly expressed, however, in the illustrations of the rock collections that Hamilton sent to the Royal Society for examination (plates XXXII–LIII and IIII–V of the supplementary volume of *Campi Phlegraei*).

Even these illustrations, however, are not entirely scientific: On Plate LIII, a colorful gem is shown protruding from the gray rock in the midst of geological specimens. It is, as Hamilton explains in the caption, a headdress set with gems from the Vesuvius region, as worn by the ladies of Neapolitan society. Even in the taxonomic part of his illustrations that seems to offer the least scope for artistic rendition, Hamilton alludes to festivities, arts and crafts, and relates aesthetics to volcanology.

Volcanic eruptions have consequences for climate, society and culture. The eruption of Tambora on the island of Sumbawa near Java in 1815, for example, was a global event. Its ash and smoke were ejected so far into the stratosphere that they reached Iceland, where they are still detectable in the ice today. They reached Europe, where they triggered a “year without a summer” in 1816, bringing darken-

ing and cold, precipitation and floods, a decline in harvests, famine, disease and emigration. Climate researchers have been able to show how the aerosols of darkening ash can be read in the coloration of sunsets in historical paintings as an effect of volcanic eruptions. As a result, riots broke out, conspiracy tales spread, and anti-Jewish riots occurred – and in this eerie atmosphere Mary Shelley wrote her novel *Frankenstein* on Lake Geneva (1818). But there were also scientific advances and technological inventions.

The Lover of the Fire Mountains

Hamilton was deeply committed to his passion for volcanoes, which for him symbolized temptation and doom at the same time. Again and again, he was driven to Vesuvius, which was as pleasurable as it was dangerous. According to his own count, the passionate dancer and horseman climbed it a total of 58 times up to 1779 alone.

Volcanoes, especially Vesuvius, but also Etna and Stromboli, which Hamilton also visited, are not least a metaphor for the eruption of passions. It was not a coincidence that his passion for his young wife Emma – just like the passion of her lover, the naval hero Lord Nelson – broke out against the backdrop of the mountains of fire. Hamilton's desire for her is thoroughly a form of pyromania.

Susan Sontag gave her novel about William Hamilton the title *The Volcano Lover* (1992). In essayistic passages that run through her historical narrative, she develops a theory of passions: for collecting, antiquity, the arts, and volcanoes, as well as for a loved one. In Emma's appealing performances – her so-called attitudes, a kind of mimic and gestural choreographies – the order of classical antiquity and the chaos of the volcanoes were, as Sontag suggests, balanced as apparently irreconcilable opposites.

In psychology, volcanoes are viewed as a significant key to the mind. In his study (Freud 1907) of Wilhelm Jensen's novella *Gradiva* (1903), Sigmund Freud turned the eruption of Vesuvius into an allegory of psychoanalysis: "There is really no better analogy for the repression that makes something psychic at once inaccessible and preserves it than the burial, as it became Pompeii's fate and from which the city was able to rise again through the work of the spade" (Freud 1907: 39–40, our translation). Elsewhere he pointed out: "The burial of Pompeii, this disappearance with preservation of the past, bears a striking resemblance to the idea of *repression*" (Freud 1907: 49–50, our translation).

William Hamilton dealt not only with the eruptions of the volcanoes, but also with their consequences: with the change of the landscape and with the burial of

human life as well as human culture. He regularly visited the excavations in Pompeii, which were systematically started in his time.

The Sublime of Nature

Since the middle of the 18th century, a perception of nature emerged for which Hamilton's view of volcanoes is exemplary. The British philosopher Edmund Burke (1729–1797) developed a theory of the “sublime” in his *Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful* (Burke 1757), which the German philosopher Immanuel Kant (1724–1804) continued in his *Kritik der Urteilskraft* (Kant 2009 [1790]: 105–110 and 127–133). Nature appears to us not only as beautiful, but at times as overwhelming. But our power of imagination can rise above what we cannot grasp sensually: a stormy sea, an inaccessible glacier, or a burning volcano. We feel the impression of the sublime when confronted with natural phenomena that appear uncontrollable and threatening, but which we can enjoy from a safe distance. In the aesthetic perception of such objects, we feel, as Kant explains, a sense of “superiority over nature itself in its immensity.” Although the individual human beings would not be able to resist the forces of nature, as rational, intellectual beings they are superior to them. The perceiving subjects thus feel the sublime as their “own sublimity,” as the “sublimity of our mental faculty.” In the most devastating scenes of eruption, Hamilton's depictions show the inhabitants of the region at a distance from the volcano, often separated by a bay, as impressed but not endangered observers. With them, in Kant's sense, we can feel a sublimity that lies not in the objects, but “in us.”

The literary and cultural history of volcanoes ranges from Pliny's account of the eruption of Mount Vesuvius in the year 79 CE, which destroyed Pompeii and Herculaneum, to Malcolm Lowry's novel *Under the Volcano* (1947) about a British consul in Mexico. Werner Herzog's documentaries bear witness to their aesthetic of the sublime, which continues to captivate scholars today: *La Soufrière* (1977) is about the imminent eruption of the eponymous volcano in Guadeloupe, in anticipation of which an entire region was evacuated, while *Into the Inferno* (2016) is about journeys with volcanologist Clive Oppenheimer to active mountains of fire in Vanuatu, Indonesia, Iceland, Ethiopia, and North Korea, where people encounter the force of nature religiously and ritually, poetically and ideologically. The history of volcanoes is not only the story of their exploration, but also the story of their fascination.

Revolutionary Volcanism

Volcanoes have always been symbols. They stood for the entrance to the underworld, for the downfall of civilization or for the eruption of passions. Their political metaphors fed the rhetorical imagery of the French Revolution. As the literary scholar Joachim von der Thüsen explains in an essay on volcanic metaphors during the time of the French Revolution, the volcano metaphor was new and avant-garde in 1789 (von der Thüsen 1996: 113–143). In Central Europe, where there are no active volcanoes, knowledge of fire mountains had not been widespread, and they were considered to be destructive only. With their increasing exploration and with popular geological works such as Hamilton's *Campi Phlegraei*, this changed. Knowledge of volcanoes grew, and their aesthetic perception as grandiose phenomena and as a creative force allowed for positive political charges. The revolutionaries used the volcanoes as a symbol for a social upheaval that took place according to natural law: for explosive resistance against static oppression and for the unstoppable spread of a movement.

But the rhetorical appropriation of volcanoes was not without problems. In Georg Büchner's drama *Dantons Tod* (1835), which is largely based on original documents and speeches from the French Revolution, the Jacobin Saint-Just compares the violence of the revolution with the violence of a natural catastrophe (Büchner 2004 [1835]: 103–105 (our translation)): "The spirit of the world uses our arms in the spiritual sphere just as it uses volcanoes or floods of water in the physical sphere." For the advocate of revolutionary *terreur*, who has less radical freedom fighters like Danton executed, political upheaval proceeds with biological or geological inevitability. Saint-Just equates human and natural history to justify killing: "What does it matter whether they die of pestilence or revolution?" Büchner uses this attitude to demonstrate the cynicism of the extremists. But even for more moderate circles, social progress was a natural process and had to be achieved by force if necessary.

Since 1789, revolutions have repeatedly been depicted as volcanic eruptions. The "dance on the volcano" has become a popular cliché. It misinterprets the French aristocracy's decadence in the 1780s, but also the failure of the German democracy in the 1920s and 30s as inevitable by misrepresenting the Revolution or Nazism as irresistible forces of Nature.

In one of Pietro Fabris's paintings in *Campi Phlegraei* (Plate XXXVIII), we see the King and Queen of the Two Sicilies in the face of a volcanic eruption in 1771, as if they were facing the outbreak of a revolution (see Fig. 2). Hamilton dismissed such signs in his reports as the mere uprising of a superstitious mob demanding that the authorities appease the volcano with images of saints. At the time, he had no idea

that a few years later he and the ruling couple would have to flee to safety from the revolutionary forces.

The last eruption of Mount Vesuvius to date occurred in 1944, when Allied troops advanced northward from southern Italy in the fight against fascism. Curzio Malaparte describes this eruption in his novel *The Skin* (*La Pelle*, 1949) as an apocalyptic metaphor of war. In the chapter “The Rain of Fire,” he allegorizes nature as an animated body from whose “wound” streams of “blood” pour, and the erupting volcano as a mythical monster that “howls,” “roars,” “screams,” and “barks” as bombers pass overhead and a colonel named Hamilton is ordered to Pompeii – from the modern scene of destruction to the ancient one.



Fig. 2. William Hamilton with the King and Queen of Naples watching a stream of lava on 11 May 1771 (Plate XXXVIII of Hamilton's *Campi Phlegraei*, 1776)

Volcano Images

After the first collection of Hamilton's volcanic texts, *Observations on Mount Vesuvius, Mount Etna, and other volcanos* (1772), had only been sparsely illustrated with five black-and-white illustrations and a map, he commissioned the artist Pietro Fabris (ca. 1730–1792) to produce a series of field drawings for the subsequent edition of his *Campi Phlegraei* in color.

Fabris drew, as Hamilton stated, “under my eye, and by my direction” (1776, vol. 1: 5) in nature, on joint excursions. Plates XIII and XXII depict this collaboration in the field: Fabris, in a blue frock coat, sits with his portfolio on his knees; Hamilton, in a red frock coat, stands beside him and points out certain features of the surroundings. As an experienced landscape painter, Fabris would have needed no guidance. It was necessary, however, when it came to geological details, to which Hamilton attached particular importance: “The exterior, and interior forms of Mount VESUVIUS, the SOLFATERRA, and of every other ancient VOLCANO in the neighbourhood of NAPLES, are represented faithfully in these Drawings, as are likewise the different specimens of Volcanick matter, such as lava’s, Tufa’s, pumice stones, ashes, sulphurs, salts &c., of which the whole country I have described, is evidently composed” (1776, vol. 1: 5). The illustrations of *Campi Phlegraei* are thus truly collaborative productions. They do not only constitute artistic representations of landscapes, but also geological diagrams.

It is not easy to recognize an artistic composition in the arrangement of the illustrations. Roughly, the plates of *Campi Phlegraei* follow the course of the excursions of Hamilton and Fabris. In addition to the numerous excursions on land to Vesuvius and the region around Naples, they traveled by ship through the Gulf of Naples and the Tyrrhenian Sea, including the islands of Capri (Plate XIII), Nisida (Plate XXII), Procida (Plate XXXII), Ischia (Plate XXX), Ventotene (Plate XXXIV), Sicily and Etna (Plate XXXVI), Stromboli (Plate XXXVII) and the Lipari Islands (Plate I). In addition to this geographic order, the plates are also based on a chronological sequence, insofar as Hamilton’s letters designate various points in time between 1766 and 1779. However, the plates and the texts are only loosely linked; the references Hamilton makes to the images in his letters do not follow any obvious structure.

Instead of a clear overall composition, individual sequences can be discerned. The second panel in itself is organized serially: it consists of seven vignettes showing the changes of Vesuvius in the course of an eruption in 1767. The panel functions like a volcanological picture story and is designed like a comic strip. In its last image, different states of the crater are even superimposed. Instead of a mimetic representation, which otherwise predominates, a diagrammatic modeling comes to the fore here.

The other motifs suggest a certain dramaturgy, too: from morning to night, from spring to winter, from calm to eruption (plates III–VI). Plates II and III of the supplementary volume also represent a day-and-night duo, insofar as they show the eruption of Vesuvius lasting over a longer period of time from a very similar point of view, once in daylight and once in darkness, in each case with a group of people in the foreground and the bay in the middle ground. In other cases, two successive illustrations form a matching pair: plates III and IIII as well as plates XXX and XXXI each depict a scene – Naples, Ischia – from opposite perspectives. In

film, such a sequence would be called a shot-reverse-shot montage. It creates a 360-degree panorama, a diptych as an all-round view.

Most clearly, the rock samples at the end of the volumes form a coherent group (plates XXXXII to LIII as well as plates IIII and V of the supplementary volume). The depictions in nature are followed by samples of stones, carefully arranged, as in a natural history cabinet. This series of pictures represents the geological collections that Hamilton sent to the Royal Society. With great precision, the artist captures not only the color of the rocks and minerals, but also their texture, so that even today a geologist can identify them. This painted collection is the end of a process: nature is first observed in the field and then explored in the museum – and finally depicted in the book.

What are the aesthetics of Fabris's paintings? They stand in a double tradition of landscape representation: on the one hand, picturesque views of bays and towns in the form of conventional *vedute* in friendly colors; on the other hand, dramatic scenes of overwhelming nature in the form of rugged mountains, inhospitable glaciers, or stormy seas. Occasionally, an early Romantic perception appears, for example in a dreary winter landscape with dark ruins (Plate V), which seems to anticipate the gothic aesthetic of the late 18th and early 19th centuries. The scenarios seem beautiful and sublime, pleasing and frightening – and at times also eerie.

Fabris has combined both forms of representation, the beautiful and the sublime, in different ways. We see an idyllic scene in the foreground, while in the background, more or less threatening, a smoking volcano rises. Or we see figures watching an eruption from a safe distance, from the other shore of a bay, while in between sailboats pass by in calm seas. Fabris often combines the picturesque and the sublime modes in one and the same image. By conveying the beauty of the Campanian landscape and the horrors of volcanic destruction, his panels condense Hamilton's most important observation: that volcanic activity is not only destructive but also creative. Paradoxically, the fertility of the region, which is visible in the lush vegetation in many of the illustrations, is a result of volcanic devastation.

The images have a scientific perspective. They are intended not only to depict the landscape and the volcanoes, but also to make them accessible for research. Guided by Hamilton, Fabris drew with a geological eye the structure of the rock, the position of its layers, the sequence of eruptions and the course of the lava, as well as the changes in the mountain shapes.

In the panels of *Campi Phlegraei*, the observer is regularly represented in the picture, easily recognizable by his red frock coat, reminiscent of the British uniforms of the time (see Fig. 3). The presence of the eyewitness in the picture authenticates Hamilton's empirical statements. As a rule, he is in the foreground, his back turned to the viewers, so that we can follow his gaze. Later, this constellation became characteristic of Caspar David Friedrich's Romantic paintings: we look at the viewer as

he looks at nature. His dandyish habitus gives the attitude of enjoying nature, non-chalant even in the face of catastrophe.

The position of the observer or the perspective of the picture is often an elevated one. The British aristocrat seems to be overlooking the Mediterranean landscape, as it were with a colonial gaze. Mary Louise Pratt described this view in her study *Imperial Eyes* as a “monarch-of-all-I-survey” scene: the aristocratic representative of an imperial power visits a foreign nature and symbolically dominates it (Pratt 1992: 202 (and passim)).

Mostly, however, the observer and his draftsman are not alone in the landscape. Often we see other people, other groups of hikers or travelers who have nothing to do with them. Someone is always already there. Nowhere is one the first here. Nature is never truly wild and remote from humans. There is a lot of civilization in Fabris’s drawings: ships, cities, buildings, roads, farm animals and fields.

Prince Franz von Anhalt-Dessau was so enthusiastic after his visit to Hamilton in Naples that he had a replica of the latter’s villa and a miniature of Vesuvius built in his park at Wörlitz in east Germany. It was even artificially erupted from time to time. Hamilton himself, when he returned to England from his diplomatic post, passed through the area with his wife and with Nelson. Already during his lifetime he had inspired an experiential staging of volcanic nature.



Fig. 3. William Hamilton and Pietro Fabris on the island of Nisida, overlooking a lake in a former volcanic crater (Plate XXII of Hamilton’s *Campi Phlegraei*, 1776)

The Destruction of Nature

With his illustrated nature reports, William Hamilton shaped our idea of volcanoes. They are a testimony to the beauty and violence of nature, its aesthetics and its exploration, its destructive and creative power. The political relevance of William Hamilton's nature writing and ecocriticism also lies in the fact that they make us aware of the violence of nature. Hamilton wrote about natural disasters of the past. Today, as a result of accelerated climate change, we are facing man-made ones.

The authors would like to thank Rex Clark for proofreading this text and his helpful comments.

References

- Burke Edmund (1757): *Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*. R. and J. Dodsley, London.
- Büchner Georg (2004 [1988]): *Dantons Tod*. In: *Werke und Briefe. Münchner Ausgabe*. Edited by Karl Pörnbacher, Gerhard Schaub, Hans-Joachim Simm and Edda Ziegler. dtv, Munich.
- Freud Sigmund (1907): *Der Wahn und die Träume in W. Jensens Gradiva*. Heller, Leipzig–Vienna.
- Goethe Johann Wolfgang von (1832): *Faust. Der Tragödie zweiter Teil*. Cotta, Stuttgart.
- Goethe Johann Wolfgang von (1991–1999): *Italienische Reise*. In: *Sämtliche Werke, Briefe, Tagebücher und Gespräche*. Edited by Friedmar Apel et al. 40 volumes. Deutscher Klassiker Verlag, Frankfurt 1993, vol. 15, no. 1, edited by Christoph Michel and Hans-Georg Dewitz.
- Hamilton William (1767): *Two Letters from the Hon. William Hamilton, His Majesty's Envoy Extraordinary at Naples, to the Earl of Morton, President of the Royal Society, Containing an Account of the Last Eruption of Mount Vesuvius*. "Philosophical Transactions of the Royal Society London," vol. 57, pp. 192–200.
- Hamilton William (1768): *An Account of the Eruption of Mount Vesuvius, in 1767: In a Letter to the Earl of Morton, President of the Royal Society, from the Honourable William Hamilton, His Majesty's Envoy Extraordinary at Naples*. "Philosophical Transactions of the Royal Society London," vol. 58, pp. 1–14.
- Hamilton William (1769): *A Letter from the Honourable William Hamilton, His Majesty's Envoy Extraordinary at Naples, to Mathew Maty, M. D. Sec. R. S. Containing Some*

- Farther Particulars on Mount Vesuvius, and Other Volcanos in the Neighbourhood.* "Philosophical Transactions of the Royal Society London," vol. 59, pp. 18–22.
- Hamilton William (1770): *An Account of a Journey to Mount Etna, in a Letter from the Honourable William Hamilton, His Majesty's Envoy Extraordinary at Naples, to Mathew Maty, M. D. Sec. R. S.* "Philosophical Transactions of the Royal Society London," vol. 60, pp. 1–19.
- Hamilton William (1771a): *Remarks upon the Nature of the Soil of Naples, and Its Neighbourhood; in a Letter from the Honourable William Hamilton, His Majesty's Envoy Extraordinary at Naples, to Mathew Maty, M. D. Sec. R. S.* "Philosophical Transactions of the Royal Society London," vol. 61, pp. 1–47.
- Hamilton William (1771b): *Extract of Another Letter, from Mr. Hamilton, to Dr. Maty, on the Same Subject.* "Philosophical Transactions of the Royal Society London," vol. 61, pp. 48–50.
- Hamilton William (1772): *Observations on Mount Vesuvius, Mount Etna, and Other Volcanos: in a Series of Letters, Addressed to the Royal Society from [...] W. Hamilton [...]: to Which Are Added, Explanatory Notes by the Author, hitherto unpublished.* Thomas Cadell, London.
- Hamilton William (1773): *Account of the Effects of a Thunder-Storm [...] upon the House of Lord Tylney at Naples.* "Philosophical Transactions of the Royal Society London," vol. 63, pp. 324–332.
- Hamilton William (1776): *Campi phlegræi. Observations on the Volcanos of the Two Sicilies as They Have Been Communicated to the Royal Society of London.* 2 volumes. Pietro Fabris, Naples.
- Hamilton William (1778a): *A letter from Sir William Hamilton, K. B. F. R. S. to Sir John Pringle, Bart. P. R. S. Giving an Account of Certain Traces of Volcano on the Banks of the Rhine.* "Philosophical Transactions of the Royal Society London," vol. 68, pp. 1–6.
- Hamilton William (1778b): *An Account of a Large Stone Near Cape Town. In a Letter from Mr. Anderson to Sir John Pringle, Bart. P. R. S.; With a Letter from Sir William Hamilton, K. B. F. R. S. to Sir John Pringle, on Having Seen Pieces of the Said Stone.* "Philosophical Transactions of the Royal Society London," vol. 68, pp. 102–106.
- Hamilton William (1779): *Supplement to the Campi Phlegræi: Being an Account of the Great Eruption of Mount Vesuvius in the Month of August 1777.* Pietro Fabris, Naples. <https://doi.org/10.3931/e-rara-9814> [accessed: 30.01.2025].
- Hamilton William (1780): *An Account of an Eruption of Mount Vesuvius, Which Happened in August, 1779. In a Letter from Sir William Hamilton, K. B. F. R. S. to Joseph Banks, Esq. P. R. S.* "Philosophical Transactions of the Royal Society London," vol. 70, pp. 42–84.
- Hamilton William (1783): *An Account of the Earthquake Which Happened in Italy, from February to May 1783.* "Philosophical Transactions of the Royal Society London," vol. 73, pp. 169–208.

- Hamilton William (1786): *The Present State of Mount Vesuvius; With the Account of a Journey into the Province of Abruzzo, and a Voyage to the Island of Ponza*. "Philosophical Transactions of the Royal Society London," vol. 76, pp. 365–381.
- Hamilton William (1795): *An Account of the Late Eruption of Mount Vesuvius*. "Philosophical Transactions of the Royal Society London," vol. 85, pp. 73–116.
- Herzog Werner (1976): *La Soufrière*. Germany.
- Herzog Werner (2016): *Into the Inferno*. United Kingdom.
- Humboldt Alexander von (1823): *Über den Bau und die Wirkungsart der Vulkane in verschiedenen Erdstrichen*. "Notizen aus dem Gebiete der Natur- und Heilkunde," March, ed. 70, vol. 4, no. 4, cols. 49–54.
- Hutton James (1788): *Theory of the Earth*. "Transactions of the Royal Society of Edinburgh," vol. 1, no. 2, pp. 209–304.
- Jensen Wilhelm (1903): *Gradiva. Ein pompejanisches Phantasiestück*. Reissner, Dresden.
- Kant Immanuel (2009 [1790]): *Kritik der Urteilskraft*. Edited by Heiner F. Klemme. Felix Meiner, Hamburg.
- Krätz Otto (1986 [1773]): *Afterword*. In: William Hamilton: *Beobachtungen über den Vesuv, den Aetna und andere Vulkane, in einer Reihe von Briefen an die Königl. Grossbr. Gesellsch. der Wissenschaften*. VCH Verlagsgesellschaft, Weinheim, pp. 213–257.
- Krätz Otto (1987): *Sir William Hamilton und die Anfänge der modernen Vulkanologie*. "Kultur & Technik," no. 3, pp. 134–140.
- Lowry Malcolm (1947): *Under the Volcano*. Reynal and Hitchcock, New York.
- Lyell Charles (1830–1833): *Principles of Geology*. 3 volumes. John Murray, London.
- Lyell Charles (1863): *The Geological Evidences of the Antiquity of Man*. John Murray, London.
- Malaparte Curzio ([1949]): *La pelle*. Aria d'Italia, Rome.
- Plinius Caecilius Secundus (2010): *Epistulae / Sämtliche Briefe*. Translated and edited by Heribert Philips and Marion Giebel. Reclam, Stuttgart.
- Pratt Mary Louise (1992): *Imperial Eyes. Travel Writing and Transculturation*. Routledge, New York.
- Shelley Mary (1818): *Frankenstein or The Modern Prometheus*. Lackington, Hughes, Harding, Mavor & Jones, London.
- Sontag Susan (1992): *The Volcano Lover*. Jonathan Cape, London.
- Thüsen Joachim von der (1996): 'Die Lava der Revolution fließt majestätisch'. *Vulkanische Metaphorik zur Zeit der Französischen Revolution*. "Francia," vol. 23, no. 2, pp. 113–143.

Abstrakt

Campi Phlegraei Williama Hamiltona – estetyka i polityka wulkanów

William Hamilton (1730–1803) był jednym z najwybitniejszych wulkanologów przełomu XVIII i XIX wieku, znanym ze swego zacięcia naukowego i burzliwego życia. Ten przedstawiciel brytyjskiej arystokracji służył jako dyplomata w Neapolu, gdzie ponad 50 razy wspinał się na Wezuwiusza i był świadkiem licznych erupcji wulkanicznych. Jego obserwacje zakończyły się publikacją *Campi Phlegraei* (1776/1779), która w tamtym czasie stanowiła najdokładniejszy opis Pół Flegrejskich w Kampanii – rozległej kaldery superwulkanu. Hamilton był żonaty ze znacznie młodszą od siebie lady Emmą (Emmą Hart), która została kochanką admirała Horatio Nelsona, postaci uwiecznionej później w licznych filmach, a także w powieści (*Miłośnik wulkanów* Susan Sontag [wyd. pol. 1997]). Hamilton słynął z bogatej kolekcji antycznych przedmiotów i swoją pasją do starożytności urzekął wielu gości, nawet tej miary, co Goethe. Jego wyprawy geologiczne przyczyniły się do odkrycia wulkanicznego pochodzenia południowych Włoch. Zwróciły one także uwagę na dwoisty charakter aktywności sejsmicznej terenu – zarówno niszczycielski, jak i mający pozytywny wpływ na żyzność gleb regionu. Barwne relacje Hamiltona dają wgląd w tajniki sił natury i dostarczają fundamentalnych informacji dla współczesnej geologii. *Campi Phlegraei* – dzieło zilustrowane przez Pietro Fabrisa, łączy naukową precyzję z artystycznym polotem, kataloguje malarskie krajobrazy i niebezpieczne erupcje wokół Neapolu. Hamilton stał się dzięki swemu dziełu pionierem estetyki pisarstwa przyrodniczego. Sporządzane na tle niepokojów politycznych, w przededniu wybuchu rewolucji francuskiej „raporty Hamiltona” odzwierciedlają także klimat społeczno-polityczny swoich czasów. Inspirujące dla pisarzy i artystów dziedzictwo Hamiltona wciąż odbija się głośnie „kulturowym echem”, zapewniając tym samym perspektywę historyczną dla dzisiejszego namysłu nad wyzwaniami związanymi z ochroną środowiska i dyskursami na temat zmian klimatycznych i „zarządzania katastrofami”.

Słowa kluczowe: geologia, wulkanologia, Pola Flegrejskie, estetyka, retoryka, polityka, pisarstwo przyrodnicze