# *Domina* Rectina's Library: Herculaneum's Villa of the Papyri

*Benefactor Taciturnus*

*The Getty Villa, above, in Los Angeles, California, is an exact replica of the Villa of the Papyri.*

**August 24, 79 CE**

For several years before 79 CE, Mount Vesuvius had been causing earthquakes around the Bay of Naples, south of Rome. Still, no one realized that Vesuvius was an active volcano.

On August 24 of that year, the volcano exploded with one of the largest eruptions in recorded European history. Very well known is the city of Pompeii, a thriving Roman city south of Mount Vesuvius, which was buried by the volcanic ash.

Less well known, but equally important, was the Roman city of Herculaneum, nestled at the foot of the volcano, on the Bay of Naples. It was wealthier than Pompeii, and was densely populated by Roman nobility, aristocrats, plutocrats, and their households.

We have an eyewitness account of what took place beginning the afternoon of August 24, 79 CE. Pliny the Younger, an eighteen-year-old from an important Roman family, was staying with his uncle, Roman naval commander Pliny the Elder, in Misenum at the northern end of the Bay of Naples.

They began to notice the plumes of smoke coming from the volcano, and Pliny the Elder began to ready his ship to sail across the Bay to investigate.

As Pliny the Elder was heading to his ship, a runner handed him a note from *Domina* (Lady) Rectina, whose villa was at the foot of Vesuvius, right on the bay, asking for help.

*Domina* Rectina's villa[1] was an enormous home, stretching some 820 feet (250 meters) along the Bay. The Getty Villa in Los Angeles is a reproduction of her home.

Rectina was justly concerned for the members of her household, and also for the safety of the villa's library, containing over 1,800 scrolls, one of the larger collections in the ancient world.

Sadly, the debris from the eruption prevented Pliny the Elder from reaching the shore of Herculaneum and Rectina's villa by the bay. He died onboard his ship, probably from the fumes and ash.

The villa, its inhabitants, and its library were buried under about sixty-five feet of ash and lava, as was all of Herculaneum.

All went silent. The cities were soon forgotten for over a thousand years.

**Rediscovery**

On October 19, 1752, *cavamonti* (diggers) recovered the first scrolls from Rectina's villa. It was a moment of extraordinary importance. No one in early modern Europe had ever seen a scroll from the ancient world. Rectina's library was the only one that survived (albeit charred) from Greco-Roman antiquity.[2]

Some of the scrolls recovered were given to Napoléon Bonaparte,[3] while others were given to Britain's George IV.[4]

Even with such amazing finds, the excavations were halted in 1765 due to complaints from residents living above the work. The precise location of the villa was forgotten again.[5]

**The Villa of the Papyri**

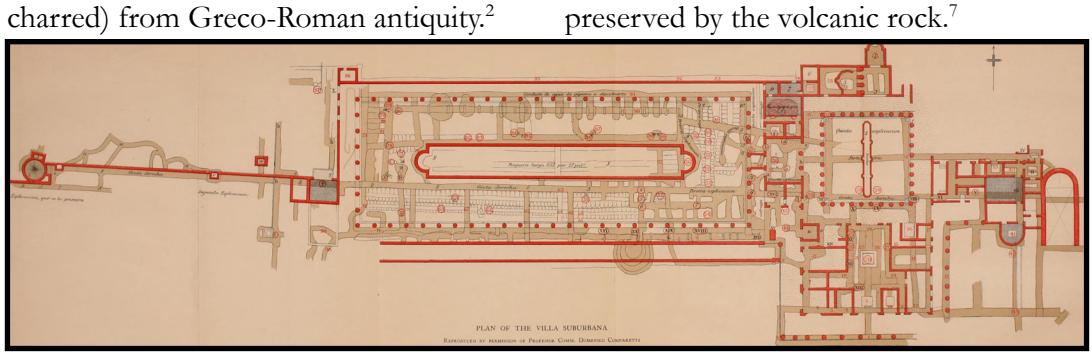
Archeologists began to study the eighteenth-century accounts during the 1980s, and were eager to recover more of the Rectina's library, now known as the Villa of the Papyri. On February 3, 1987, Baldassare Conticello, the Superintendent of Archeology for Herculaneum and Pompeii, made the breakthrough.

By the end of the 1980s, the inventory comprised 1,826 scrolls and fragments,[6] with more than 340 almost complete, around 970 partly decayed, and over 500 charred fragments. Most are held at Naples National Archaeological Museum.

As the only Greco-Roman Library to survive intact, the scrolls from the Villa of the Papyri are of immense interest to historians and classicists.

**Unrolling the Mystery**

The scrolls in the library were carbonized by the heat of the pyroclastic flows from Vesuvius. Since this occurred very quickly, deprived of oxygen, they compacted into fragile blocks, and were preserved by the volcanic rock.[7]



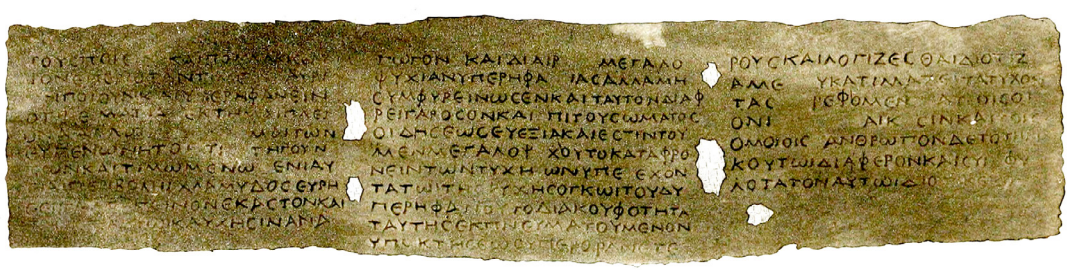

*Plan of the Villa of the Papyri, taken from the book* Herculaneum, past, present & future *by Charles Waldenstein, published in 1908.*

Reading the scrolls presents many layers of challenges. First, they are rolled and are blocks and are very fragile. Second, they are burned and charred so that, in many cases, the ink and the paper are indistinguishable from one another. Once these hurdles are overcome, translators must then painstakingly recover the text from Ancient Greek, and some Latin, no mean feat in itself, as reading manuscripts from the Classical Period often requires advanced paleographic skills.

In the twentieth century, 585 rolls and fragments were fully unrolled, and 209 partially unrolled. Around 200 were deciphered and published, while 150 were deciphered but not yet published.[8]

astronomers capture light beyond the ordinary frequencies that human eyes can see. These include the infrared, for example. In so doing, investigators are able to retrieve far more information than is available in visible light. Since the infrared range includes vibrations at a length of 1000 nm (nanometers = one billionth of a meter), this is particularly useful for recovering burned or otherwise damaged documents.

To the naked eye, the text appears to be black ink on black paper, and is, in spots, virtually unreadable. Viewed at 1000nm, there is a distinct difference between the reflectivity of



*An example of a carbonized scroll from Herculaneum, in an image taken from the 1858 book* Tesoro letterario di Ercolano *(*Herculaneum Literary Treasure*), by Giacomo Castrucci.*

Twentieth-century and earlier attempts met with both successes and tragic failures. In some cases, the scrolls exploded into hundreds of fragments.

**The Answer is in the Stars**

Beginning in 1999, Brigham Young University in Utah began using Multispectral Imaging (MSI) on the unrolled scrolls.[9] Around 800 trays of fragments were analyzed and digitized over nineteen years, so that scholars could begin work on deciphering and translating them.

The technique is from the world of Space Exploration:

> Multispectral Imaging originated in the world of space science, as

the ink and the paper, thus rendering the text legible.

In parallel, other modern technologies, such as digital processing of ultraviolet scanning, X-rays, and visible light have led to the full reading of ancient documents. [10]

Other modern efforts include a team from Kentucky and the Institut de Papyrologie that used X-rays and nuclear magnetic resonance in 2007 to analyze the structure of some of the scrolls,[11] and another team in 2009 from the Institut de France and the French National Center for Scientific Research that employed X-ray micro-computed tomography (micro-CT) which creates cross-sections of an object that can be used to create a 3-D model.

This technique is similar to the one used for the Rosicrucian Egyptian Museum's child Mummy Sherit.[12]

Still the problem of unrolling the delicate charred scrolls remained.

On April 1, 2018, CBS's *60 Minutes* told the story of the competition between two Italian scholars, Graziano Ranocchia and Vito Mocella, and Dr. Brent Seales,[13] Chair of Computer Sciences at the University of Kentucky, from 2015 to the present, to successfully use the powerful Synchrotron X-ray phase-contrast tomography to virtually unroll the scrolls. Seales's method shows the most promise.[14]

Efforts are ongoing using Synchrotron X-ray phase-contrast tomography, as *Domina* Rectina's library at the Villa of the Papyri may someday yield all its secrets, including the newly discovered library of Latin papyri found in a lower level of the villa.[15]

**From Ashes to Atoms**

From the hundreds of scrolls already analyzed and translated, we have a very good idea of the content of the library.

The bulk of the collection seems to be works of Epicurean philosophy. Large portions of Epicurus's *On Nature* have been found, as well as works by other Epicureans such as Philodemus of Gadara.[16] Sections of *On Providence* and *Logical Questions* by the Stoic Philosopher Chrysippus have been identified,[17] as well as other literature, including a section of a lost work on Plato by Apuleius, the author of *The Golden Ass*.[18]

What is significant about Epicureanism in considering ancient mystical traditions?

For most people today, the word "Epicurean" means what the *Macmillan Dictionary* gives as "relating to the enjoyment of things such as good food and drink."[19] While the Ancient Greek Philosopher Epicurus (341-270 BCE) did hold pleasure (ἡδονή—*hēdoné*, the root of our modern term "hedonism,") to be the highest good, he taught that the way to pleasure was to live moderately, to learn about the workings of the world, and to limit one's desires.[20]

The basis of his philosophy was an adaptation of Democritus's theory of the atomic nature of all reality. "Atom" comes from the Greek adjective ἄτομος (*átomos*), literally "*ἀ*" (not) "*tomos*" (cut or divisable).

Epicurus held that the elementary constituents of nature are undifferentiated matter, in the form of discrete, solid, and indivisible particles ("atoms") below the threshold of perception, plus empty space, that is, the complement of matter or where matter is not.[21]

This provided him with a foundation for a kind of spiritual materialism, leading to an ethical life, no fear of divine retribution nor fate, and no fear of death. Friendship was of great value to Epicurus, and he considered his followers as a community of friends.[22] For Epicurus, the deities exist, but they did not manipulate people or the universe, which operates according to universal laws.[23] Some scholars believe that for Epicurus, the deities were mental creations,[24] an idea of mental creation not dissimilar to that proposed by David K. Stolowitz in a *Rose-Croix Journal* Paper in 2007. Stolowitz proposed that the polytheistic gods might be mental creations in the Kabbalistic Formative World (*Yetzirah*), either being emanated from above, or created by human consciousness from below. [25]

Many Greeks of his time were frightened that after death, they would suffer in Hades. Epicurus taught that there was nothing to fear, as at death, the person's components, including the soul, are simply re-absorbed into the cosmos, a kind of reintegration.

The library at the Villa of the Papyri seems to have been filled with Epicurean works, and so we can suppose that Rectina's household followed this noble philosophy of life.

One of the authors represented included Philodemus, who encapsulated Epicurus's teaching as:

> Don't fear the Divine
> Don't worry about death;
> What is good is easy to get, and
> What is terrible is easy to endure.[26]

Latin speakers in Rome had been introduced to Epicureanism by the Roman poet and philosopher Titus Lucretius Carus (ca. 99-55 BCE), whose vast poem *De rerum natura* (*On the Nature of Things*) is an exposition of Epicurean Philosophy.[27]

Influential and admired in the ancient world, Lucretius's Epicurean poem disappeared from Western Europe during the Middle Ages. A single copy was recovered from a German monastery by Papal Secretary, bibliophile, and book-hunter Poggio Bracciolini in 1417. It was copied and distributed, with wide effect on Western thought, leading to the development of Atomism, and the construction of Christian Humanism, as well as being one impetus for the Italian Renaissance.

The whole fascinating story of *De rerum natura*'s narrow rescue and its effects are told in a most informative and entertaining fashion by Stephen Greenblatt's 2012 Pulitzer Prize-winning *The Swerve: How the World Became Modern*.[28]

### What's Past is Prologue

During the next several decades, the careful and painstaking process of excavating, digitizing, deciphering, and translating the philosophical and literary treasures in the Villa of the Papyri will likely continue apace now that momentum has built, and the appropriate technologies and scholarship have been marshaled.

Even though the work will be long and arduous, it seems fitting that such immense efforts be taken on behalf of a library from the city named for Hercules, famed for his Twelve Labors.

With the immense positive impact that Lucretius's *De rerum natura* had on Western Civilization, we can only hope that some of the materials in this unique surviving Greco-Roman Library will have a salubrious effect on a world much in need of healing.

Our gratitude reaches back, across the millennia, to Domina Rectina, her husband, and household for lovingly curating the library of the Villa of the Papyri, so that its ancient mystical wisdom would not perish.

The very atomic theory taught by Epicurus is at the basis of much of the technology that is now capable of transmitting this ancient light to us, just as, when we gaze up at the stars, we are seeing the light of times long gone: the light of the cosmos, and of wisdom, which never fades.

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### Endnotes

1. The identity of Rectina's husband has remained controversial to the present day. Candidates include Lucius Calpurnius Piso Caesoninus, Julius Caesar's Father-in-Law (Hornblower, Simon and Antony Spawforth. *Oxford Classical Dictionary*. 3rd ed. New York, 1996) and the Epicurean Philosopher Philodemus of Gadara (Ethel Ross Barker, Buried Herculaneum. London: A & C Black, 1908, 82. Accessed June 14, 2018. https://archive.org/stream/buriedherculaneu00barkuoft#page/82/mode/2up)
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Accessed June 14, 2018. https://web.archive.org/web/20151030232207/http://www.napoleon.org/en/magazine/interviews/files/476891.asp

4. David Diringer. *The Book Before Printing: Ancient, Medieval and Oriental*. New York: Dover Publications, 1982. pp. 252–6.

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6. "IV The Herculaneum Papyri." *Bulletin of the Institute of Classical Studies* 33 (1986), pp. 36–45. Accessed June 14, 2018. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.2041-5370.1986.tb01374.x

7. "Interview with Daniel Delattre: the Herculaneum scrolls given to Consul Bonaparte" Op. Cit. and Victoria Jaggard, "Ancient Scrolls Blackened by Vesuvius are Readable at Last," 2015. Accessed June 14, 2018. https://www.smithsonianmag.com/history/ancient-scrolls-blackened-vesuvius-are-readable-last-herculaneum-papyri-180953950/

8. David Diringer. Op. Cit., 252-6.

9. "Digitization of Herculaneum Papyri Completed" *Insights* 22:6 (2002) Maxwell Institute, Brigham Young U. Accessed June 14, 2018. https://publications.mi.byu.edu/fullscreen/?pub=1293&index=1. BYU Herculaneum Project Honored with Mommsen Prize Insights 30:1 (2010) Maxwell Institute, Brigham Young U. Accessed June 14, 2018. https://publications.mi.byu.edu/fullscreen/?pub=1367&index=2.

10. Armstrong, Ibid., 54-55. See R.A. Schowengerdt. *Remote sensing: Models and methods for image processing*, London: Academic Press, 3rd ed., 2007, and "The Archimedes Palimsest." Accessed June 14, 2018. http://archimedespalimpsest.org/about/imaging/.

11. "Interview with Daniel Delattre: the Herculaneum scrolls given to Consul Bonaparte" Op. Cit.

12. "Sherit" Rosicrucian Egyptian Museum site. Accessed June 14, 2018. https://egyptianmuseum.org/sherit.

13. W. Brent Seales, Jim Griffioen, and David Jacobs. "Virtual Conservation: Experience with Micro-CT and Manuscripts." In *Eikonopoiia: Digital Imaging of Ancient Textual Heritage: Proceedings of the International Conference, Helsinki, 28–29 November 2010*. Edited by Vesa Vahtikari, Mika Hakkarainen, and Antti Nurminen, 81–88. Helsinki: Societas Scientiarum Fennica, 2011.

14. "The Scrolls of Herculaneum" *60 Minutes*. Broadcast April 1, 2018. Accessed June 14, 2018. https://twitter.com/60minutes/status/980593251882291202?lang=en and Karla Ward, "'60 Minutes' to feature UK prof who developed a way to decipher ancient scrolls," *Lexington Herald Leader*, March 31, 2018. Accessed June 14, 2018. http://www.kentucky.com/news/local/education/article207599594.html

15. Vito Mocella; Emmanuel Brun; Claudio Ferrero; Daniel Delattre. (2015). "Revealing letters in rolled Herculaneum papyri by X-ray phase-contrast imaging." Nature Communications. 6: 5895 (2015). Accessed June 14, 2018. http://www.nature.com/articles/ncomms6895.

16. CISPE Il Centro Internazionale per lo Studio dei Papiri Ercolanesi. Accessed June 14, 2018. http://www.cispe.org/en/

17. "The first of Chrysippus' partially preserved two or three works is his Logical Questions, contained in PHerc. 307 ... The second work is his On Providence, preserved in PHerc 1038 and 1421 ... A third work, most likely by Chrysippus is preserved in PHerc. 1020," Fitzgerald 2004, p. 11

18. Justin A. Stover. *A New Work by Apuleius: The Lost Third Book of the De Platone*. Oxford: Oxford University Press, 2017.

19. "Epicurean" at *The Macmillan Dictionary*. Accessed June 14, 2018. https://www.macmillandictionary.com/dictionary/british/epicurean.

20. David Konstan. "Epicurus". *Stanford Encyclopedia of Philosophy*. Accessed June 14, 2018. https://plato.stanford.edu/entries/epicurus/.

21. Konstan. Ibid. Section 3 "Physical Theory."

22. Konstan, ibid. Section 6 "The Epicurean Life."

23. Tim O'Keefe. *Epicureanism*. University of California Press, 2010. pp. 155–156.

24. David Konstan. "Epicurus on the gods". In Jeffrey Fish; Kirk R. Sanders, *Epicurus and the Epicurean Tradition*. Cambridge: Cambridge University Press, 2011. pp. 53–54.

25. David K. Stolowitz. "Voices of Fire – Spiritual Entities and Personality," *Rose-Croix Journal* Vol 4 (2007), 99-101.

26. Philodemus, *Herculaneum Papyrus,* 1005, 4.9–14

27. The full text in Latin and English may be found at The Perseus Project. Accessed June 14, 2018. http://www.perseus.tufts.edu/hopper/searchresults?q=Lucretius . I have a personal relationship with Lucretius's work, as in our Brophy/Xavier Latin class during High School in Phoenix, AZ, 1968-1972, Fr. Maurice Brill, S.J. one year had the class memorize the prologue to the Latin poem in authentic Roman Metre, and it is still in my head: "Aeneadum genetrix hominum divomque voluptas…"

28. Stephen K. Greenblatt, *The Swerve: How the World Became Modern*. New York: Norton, 2012. Many thanks to our Grand Secretary Soror Wark for gifting me with a copy!