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MASSACHUSETTS STATE TREE: THE STORY OF THE AMERICAN ELM

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*...elm wands prefer owners with presence,
magical dexterity and a certain native dignity*
– Mr. Ollivander (J.K. Rowling "Harry Potter")

A large elm tree was growing on the commons in the early part of the 19th century and a legend started that Washington took his oath under its branches (Fig. 1). The myth was perpetuated by a fictitious "eye-witness" journal published in 1876. According to traditional American history books, Washington took command of a ragtag army under the elm (Fig. 3),



Fig. 1. Washington Elm, Cambridge, Massachusetts, c. 1915 a photo by A Macarthur.



Fig. 2. Our student project group: M. Lysenko, V. Novokhatska, and M. Rud (right).



inspiring the men to become a professional fighting machine... And nowhere is there any mention of an elm... While it can't be proved, it can't be disproved [17; 25]. The elm tree is popular in mythology around the world – symbolizing victory, man's achievement of goals, and more [13], see video [61].

Fig. 3. The elm tree under which G. Washington took command of the American Army on July 3, 1775.

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That tree was toppled by a storm in 1923 (Fig. 4, 5, 6) and was subsequently cut into pieces by the City of Cambridge and was presented to "Prominent People". The plaque reads "A Piece of the Elm Tree Formerly Standing in Cambridge, Massachusetts Under Which George Washington took Command of the American Army, July 3, 1771. Presented by the City of Cambridge 1924" [40], Fig. 7.

The government of Cambridge had to rescue what remained from souvenir hunters eager to get their hands on a piece of the tree [18].

It was determined to make of them "an object lesson in patriotism for the whole country." To this end they were sawn into numerous fragments. A large piece of the main trunk was sent to the governor of each of the forty-eight states, and the section from which the rings were counted was polished and presented to the museum at Mt. Vernon. From the smaller branches were made a quantity of gavels [18].

The tree was cut up into approximately 1000 pieces the following year, and some pieces, including this one, were distributed as souvenirs. Descendant trees were also cultivated from living parts of the elm [74].



Fig. 4. Washington Elm Tree, Cambridge, Massachusetts.

The legend of what became known as "the Washington Elm" may have taken root because of other famous Revolutionary War-era trees. Boston's Liberty Tree was an elm tree where people hung their favorite effigies and met to conspire against King George. Eventually, places all over the new nation planted their own "liberty trees," and elms became

known for their Revolutionary War connotations [5].

Now about 65 years old, the grandson of the original elm is thriving (Fig. 8); its branches form a huge green canopy that spans about 40 yards between the two buildings. A plaque presented by the local chapter of Sons of

Fig. 7. A Piece of the Elm Tree (1924).



Fig. 5. Washington Elm Tree (1923).



Fig. 6. The diseased elm tree, 1923.



the American Revolution notes that it is a scion of "the tree under which Gen. George Washington first took command of the American Army" [17].

The tree is a genetically identical descendant from the famous Washington Elm in Cambridge, Massachusetts. The University Washington Botanic Garden's Washington Park Arboretum (Seattle) has another scion of the Washington Elm which will make a good candidate to take a cutting and create a new scion [18].

But according to the Cambridge Historical Commission, there is no proof that Washington ever took his army oath under an elm tree in Cambridge Commons.

By The Editors of Encyclopaedia Britannica (View Edit History), elm, (*genus Ulmus*), genus of about 35 species of forest and ornamental shade trees of the family *Ulmaceae*, native primarily to north temperate areas [13].

With his many years` experience of working as an aboriculturalist for Brighton & Hove City Council, Rob Greenland talks authoritatively about the importance of safeguarding the National Elm Collection in Brighton and shares his expertise in elm tree disease management (see video [81]).

The **American elm**, (*Ulmaceae Ulmus americana*) was adopted as Massachusetts official tree on March 21, 1941 to commemorate the fact that General George Washington took command of the Continental Army beneath one on Cambridge Common in 1775. It is a large tree, with gray flaky bark. When growing in the forest it often attains a height of 120 feet, but in the open it is wide-spreading and of lesser height. The leaves are oval, and dark green, turning to a clear yellow in the autumn. The American Elm, like most elms, has been severely afflicted by Elm Disease [29; 23, p. 33], see the video [14].



Fig. 8. A close-up shot of the split between two of the three major limbs of the George Washington Elm.



Fig. 9. A book made from the "Washington's Tree".



The American elm (*Ulmaceae Ulmus americana*) is the official Massachusetts state tree. The law designating the American elm (Fig. 10) as the official Massachusetts state tree is found in the General Laws of Massachusetts, Part 1, Title 1, Chapter 2, Section 8 [29].

Fig. 10. The American elm.

The **American elm**, (*Ulmaceae Ulmus americana*), was adopted as Massachusetts official tree on March 21, 1941 to commemorate the fact that General George Washington took command of the Continental Army beneath one on Cambridge Common in 1775. It is a large tree, with gray flaky bark. When growing in the forest it often attains a height of 120 feet, but in the open it is wide-spreading and of lesser height [29].

Ulmus americana, generally known as the **American elm** or, less commonly, as the **white elm** or **water elm**, is a species native to eastern North America, occurring from Nova Scotia west to Alberta and Montana, and south to Florida and central Texas. The American elm is an extremely hardy tree that can withstand winter temperatures as low as $-42\text{ }^{\circ}\text{C}$ ($-44\text{ }^{\circ}\text{F}$). Trees in areas unaffected by Dutch elm disease can live for several hundred years (see video [63]).

American elm (*Ulmaceae Ulmus americana*) is most notable for its susceptibility to the wilt fungus, *Ceratocystis ulmi*. Commonly called Dutch elm disease, this wilt has had a tragic impact on American elms. Scores of dead elms in the forests, shelterbelts, and urban areas are testimony to the seriousness of the disease. Because of it, American elms now comprise a smaller percentage of the large diameter trees in mixed forest stands than formerly. Nevertheless, the previously developed silvical concepts remain basically sound [17; 28], see video [59].



Fig. 11. American elm. Seeds.



Fig. 12. Seedlings.



Fig. 13. Leaves.

Fruit Type – **Winged samara** (Fig. 15), oval-globose and wafer-like in



Fig. 14. Flowers.



Fig. 15. Fruit Type.

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appearance, notched. Fruit Color: Light-green, changing to tan. Growth Habit: Trunk divides into several erect arching limbs above, umbrella to vase-shaped [1].

Once a very popular and long-lived (300+ years) shade and street tree. The people like walking along American elms in Central Park of New York (Fig. 16). The Literary Walk, found at the southern end of the Mall, contains statues of such well-known literary figures as William Shakespeare, Sir Walter Scott, and Robert Burns among others [57], see video [58; 34; 72]. And Rows of American elm trees line a path south of the Lincoln Memorial Reflecting Pool on the National Mall in Washington, D.C. [52], see the video [26], Fig. 17.



Fig. 16. The Mall and Literary Walk in Central Park (New York, 2013).



Fig. 17. Rows of American elm trees line, Washington, D.C. (November 11, 2006).

American elm suffered a dramatic decline with the introduction of Dutch elm disease, a fungus spread by a bark beetle (Fig. 21). The wood of American elm is very hard and was a valuable timber tree used for lumber, furniture and veneer. The Indians (Fig. 18) once made canoes out of American elm trunks, and early settlers would steam the wood so it could be bent to make barrels and wheel hoops. It was also used for the rockers on rocking chairs. Today, the wood that can be found is used mainly for making furniture [12].

The Treaty Elm, Philadelphia, Pennsylvania. In what is now Penn Treaty Park, the founder of Pennsylvania, William Penn, is said to have entered into a treaty of peace in 1683 with the native Lenape Turtle Clan under a picturesque elm tree immortalized in a painting by Benjamin West. West made the tree, already a local landmark, famous by incorporating it into his painting after hearing legends (of unknown veracity) about the tree being the location of the treaty. No documentary evidence exists of any treaty Penn signed beneath a particular tree [68].



Fig. 18. Penn's Treaty with the Indians and Indians with treaty in 1683. (1771–1772).

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American Elm can be distinguished from other elms (*Ulmus* spp.) by considering the following characteristics: 1) its samaras are ciliate along their margins, otherwise they are hairless, 2) the upper surface of its leaves is largely hairless with a smooth to slightly rough texture, 3) on each side of the central vein of a leaf, there are 0–3 lateral veins that become forked toward the leaf margin, 4) a cross-section of the bark on older trees reveals alternating light and dark layers, and 5) its terete twigs never have corky wings [2], see videos [22; 3].

American elm should be grown in full sun on well-drained, rich soil. Propagation is by seed (Fig. 11, 12) or cuttings. Young plants transplant easily [12].

Diseases: Many diseases may infect American Elm, including Dutch elm disease (Fig. 19, 20), phloem necrosis, bark beetles (Fig. 21), leaf spot diseases, and cankers (Fig. 22, American Elm is a host for *Ganoderma* butt rot (Fig. 23) [12].



Fig. 21. Bark Beetle.

Fig. 19. Dutch elm disease.

Fig. 20. Bark.



Fig. 23. Ganoderma butt rot.

Fig. 22. Elm yellows.

'Herbie' was the oldest and tallest elm in New England when cut down in 2010. Now, 1,500 clones are helping to preserve its legacy [8], Fig. 23.

Below given the scientific description of the American elm.

The first scientific description of the plant was written by the "father of botany" Karl Linnaeus in 1768.



Fig. 24. American elm 'Herbie', 2010.

Identification of the American Elm (*Ulmaceae Ulmus americana*)

Kingdom: Plantae – Plants.

Subkingdom: Tracheobionta - Vascular plants.

Superdivision: Spermatophyta - Seed plants.

Division: Magnoliophyta - Flowering plants.

Class: Magnoliopsida – Dicotyledons.

Subclass: Hamamelididae.

Order: Urticales.

Family: Ulmaceae - Elm family.

Genus: *Ulmus* L. – elm. (Fig. 25).

Species: *Ulmus americana* L. - American elm.

Common Names: American elm also known as white elm, water elm, soft elm, or Florida elm.

Plant Type: Deciduous and semi-deciduous trees

Size: 15 to 30 m

Width: 180 cm

Leaf: Alternate, 3 to 6 inches long, 1 to 3 inches wide; margin coarsely and sharply doubly serrate, base of leaf conspicuously inequilateral; upper surface glabrous or slightly scabrous, paler and downy beneath (Fig. 13, 22).

Flower type: Appears March to May before leaf buds open, drooping clusters in fascicles of 3 to 5, appearing before the leaves, small, hairy (Fig. 14, 26).

Flowers and Fruits Flower Type: Polygamo-monoecious, in fascicles of 3 or 4.

Flower Color: Greenish-red to brownish.

Fruit Type: Winged samara, oval-globose and wafer-like in appearance, notched.

Fruit Color: Light-green, changing to tan.

Bloom shape: High-centered.

Bloom Color: Red , Green

Flowering: Repeat Flowering

Bloom Size : Small

Fruit: Rounded samaras, 3/8 to 1/2 inch across, deeply notched at apex, hairless except for margin; appears April to May (Fig. 15).

Twig: Slender, glabrous, slightly zigzag, reddish-brown; buds over 1/4 inch long, reddish-brown with darker edged scales, often placed a little to one side of the twig (Fig. 27).

Bark: Dark, ashy-gray, flat-topped ridges separated by diamond-shaped fissures; outer bark when sectioned shows distinct, alternating, buff colored and reddish-brown patches. When young it is often quite spongy (Fig. 28).

Form: In the open, the trunk is usually divided into several large, ascending and arching limbs, ending in a maze of graceful drooping branchlets (Fig. 16, 25).

Life cycle: Perennial.

Sun Requirements: Full Sun [1; 12; 29; 48; 67].



Fig. 25. The elm trees in autumn.



Fig. 26. Flower.



Fig. 27. Twig with buds.



Fig. 28. Bark with brown patches.

Let's learn more about elm tree symbolism, spiritual meaning, and uses.

This sacred tree is associated with the cycle of life, death, and rebirth. The ancient Greeks believed that the first grove of elms was born around Orpheus (**video [50]**).



Fig. 29. Eurydice Tapestry Wall Hanging.

to tame wild animals, encourage trees to dance, move rocks, and even change the course of rivers. Euridice was an oak nymph in Greek mythology. One of the daughters of Apollo and wife of Orpheus, she stepped on a venomous snake on her wedding day and died instantly [37; 38], (Fig. 29), (the videos [32; 54; 55]).

Orpheus was the son of the Thracian river god and the muse Calliope. In some myth versions (like Pindar) he is the son of Apollo and Calliope. Known as a talented singer and musician, Orpheus owed his talent to his beloved Apollo who gifted him with a golden lyre with which it was possible

to tame wild animals,



Fig. 30. Orpheus and Eurydice by Jean-Baptiste-Camille Corot.

It should be emphasized There are at least 75 known operas offering various takes on the Orpheus myth: later in the 17th century, from Matthew Locke in England, Charpentier and Lully in France and Reinhard Keiser in Germany, then from Telemann, Benda and Haydn in the 1700s.

Orfeo ed Euridice (French: *Orphée et Eurydice*; English: *Orpheus and Eurydice*) is an opera composed by Christoph Wikibald Gluck (Fig. 32), based on the myth of Orpheus and set to

Fig. 32. Christoph Wikibald Gluck (1775).



Fig. 31. American elm tree in a park in Pittsfield, Massachusetts (August 2020).



a libretto by Ranieri de' Galzabigi. It belongs to the genre of *the azione teatrale*, meaning an opera on a mythological subject with choruses and dancing. The opera is the most popular of Gluck's works, and was one of the most influential on subsequent German operas [31], (see the videos [31; 15; 16]).

The elm tree (genus *Ulmus*) is prominent in Teutonic mythology, where it was said to have been given a soul by the god Odin, senses by Hoenir, and blood and warmth by Lodur, becoming Embla, the first woman. In Finno-Ugric mythology the elms were believed to be the mothers of the fire goddess Ut. In England the tree was associated with elves and sometimes known as "elven." At Lichfield, England, choristers of the cathedral used to deck the cathedral, close, and houses with elmboughs on Ascension Day.

It was believed that the falling of the leaves of an elm tree out of season predicted a murrain (disease) among cattle. The elm was also used to cure cattle disease by means of the "need fire," when two pieces of wood were rubbed together until they ignited and a bonfire was built, through the smoke of which the cattle were driven. The leaves were used medicinally as a poultice for swellings, and the inner bark of the tree was used for skin and venereal infections. The slippery elm (*U. fulva orrubra*), mixed with milk, is still used by herbalists as a demul-cent drink [13].

The elm tree serves as a symbol for those born from January 12th to the 24th, and also from July 15th to the 25th. This tree serves as a birth symbolism for nobility and open-mindedness...

Those born under the elm tree symbolism are elegant people, geared towards decoration and design. Natives to the elm symbol are considered gentle and refined.

The elm gives its natives the ability to plan in great detail, making them quite cautious, and even indecisive at times. This quality of the elm pushes its natives to work independently, not fairing so well to any kind of authority at work.

This tree makes those born under it honest, loyal, and generally loved by family, friends, and

associates (see the video [56]). If you are a native of the elm tree, tradition would recommend keeping three small elm leaves with you[62], Fig. 33.

The elm tree also represents our aspirations and intuition. To the ancients, the elm signified dreams was dedicated to Morpheus, and in France "the tree of justice" where judges received inspiration for sentencing. In Scandinavian mythology, the first person was born from an elm; a female tree (Fig. 34).

In popular culture, it is the tree which brides turn



Fig. 33. Three small elm leaves.



Fig. 34. "The tree of justice".

to ask for fruitfulness. The elm has always been used to support vines, as partners in marriage and friends support each other, it is seen as a symbol for romantic love and the bonds of friendship.

The elm tree is firmly anchored into the earth, thanks to its strong roots. Because of this, the elm is a symbol for strength and longevity, who's leaves are made into a bed for children – strengthening their bones and joints. The elm is a magical tree, bringing order to chaos, the courage to the fearful, and solutions to those facing difficulties. The elm is a great protector, exorcising evil, it's seen planted in front of churches and houses as a good omen. The elm is the tree where people gathered to meditate under.

The tree of dreams and dreams being a divine gift, the elm guides us in our asleep state's journey. The elm tree serves as a great liberator as well, freeing us from our past, old beliefs, limitations, and touches our hearts – helping us to expand in consciousness and grow into something greater than ourselves. This is all made possible when we allow the elm to guides us in our dreams.

The elm is the purifier, protector, and liberator – leading us to self-realization. Through the great elm tree, all of our fears and limitations are put to rest as we know our true potentials in this continuous cycle of birth and rebirth [62].

The Knights Templar look upon the elm as being a prophetic tree. Virgil displays the elm in the center of the atrium to access the cave of the Sibyl Cumana. It's a tree of a clear vision, divination, and prophecy [62], **see video [33], Fig. 14, 15.**

The cave, collapsed in the initial part, is entirely dug into the tufa and has a perfectly straight line (Fig. 35), although it tends to go down towards the end: it has a trapezoidal shape in the upper part (Fig. 36), anti-seismic stratagem used by the Greeks, and rectangular in the lower one, the result of the lowering of the walkway during the Augustan period; the whole structure is therefore one hundred thirty-one meters long, five high and two and a half wide [47].



Fig. 35. The cave of the. Fig. 36. A perfectly straight line. Fig. 37. Illuminating of the room Fig. 38. The room where the Sibyl Cumana lived.

Along the west wall, at regular intervals, with the same form of the antrum, were made by the Romans nine openings, three of which were walled, with the purpose of illuminating the environment, to allow the exchange of air and reach the terracing on

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which the war machines were located (Fig. 37); on the east wall opens a room that gives access in turn to three rooms, with lowered floor, used as cisterns and then as a burial place, as well as all the rest of the structure: along the same side is a small room, with a stone seat, even if due to the lowered ceiling it is impossible to sit down and its function therefore remains unknown.

The cave ends with a room with a flat vault, in which three niches open (Fig. 38): one on the east side serves to illuminate the environment, one on the south side is a dead end and that on the west side is the size of a cubicle, with ternary and preceded by a vestibule probably protected by a gate which can be seen even the holes in the jambs in the wall and according to tradition, this would be the room where the Sybil lived, even if its construction probably dates back to the late Imperial age (see the video [47]).

"THE GATES OF HELL ARE open night and day; Smooth the descent, and easy is the way: But to return, and view the cheerful skies, In this the task and mighty labor lies... "

The Aeneid (29–19 BC), book VI, Virgil [60]

Virgil (Fig. 39) famously described a cave with a hundred openings as home to one of the most famous prophetesses of ancient legend – the Cumaean Sibyl. Written in 19 BC, the Aeneid chronicles the adventures of Trojan warrior Aeneas, including his encounter with a mysterious ancient fortune teller. It was said this oracle, or sibyl, dwelt in the mouth of a cave in Cumae, the ancient Greek settlement near what is now Naples.

"A spacious cave, within its farmost part, Was hew'd and fashion'd by laborious art Thro' the hill's hollow sides: before the place, A hundred doors a hundred entries grace; As many voices issue, and the sound Of Sybil's words as many times rebound." (Fig. 40, 41)

In the poem, the Sibyl acts as a kind of guide to the underworld, to which Aeneas must descend to seek the advice of his dead father Anchises and fulfill his destiny [7].



Fig. 39. Publius Vergilius Maro (70–19 BC).



Fig. 40. Aeneas and the Cumaean Sibyl. by François Perrier.

In the painting above (Fig. 40), the French artist François Perrier (c. 1594–1649) re-created a scene from book 6 of *The Aeneid*, an epic poem written by the Roman poet, Virgil. Center stage in the painting, dressed in the golden-yellow armor, is a depiction of the Trojan refugee, Aeneas, who was said to have fled to Italy after the Trojan War, where he began a lineage that would eventually produce Romulus and Remus, the legendary founders of Rome. During his adventures, Aeneas met with the Cumaean Sibyl – shown on the right side of the painting, dressed in white. Sibyls and other prophetess types, such as the mystic women who plied their trade at Delphi, were

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often a particularly erratic and flamboyant cast of characters, sure to shock their visitors with exaggerated body gestures and barrages of cryptic messages from the beyond. The Cumaean Sibyl was no different, and the poet Virgil masterfully captured her strangeness in the following passage from *The Aeneid*, which colorfully describes the sibyl's transformation as she began her ceremony for Aeneas and his followers [19]:

"Now carved out of the rocky flanks of Cumae lies an enormous cavern pierced by a hundred tunnels, a hundred mouths with as many voices rushing out, the Sibyl's rapt replies. They had just gained the sacred sill when the virgin cries aloud: 'Now is the time to ask your fate to speak! The god, look, the god!'



Fig. 41. Virgil's Aeneid, Scene with Cumaean Sibyl.

So she cries before

the entrance—suddenly all her features, all her color changes, her braided hair flies loose and her breast heaves, her heart bursts with frenzy, she seems to rise in height, the ring of her voice no longer human—the breath, the power of god comes closer, closer." (Virgil, *The Aeneid*, book 6, approx. lines 50–70) [60].

This was not the first appearance of the Cumaean Sibyl in art and literature, nor the last. The most famous story dates to the time of the last Roman King, Tarquinius Superbus, around 500 BC.

According to the story, the Sibyl approached the King with nine books of prophesy, collected from the wisest seers, available to the king for a very dear price. The King haughtily refused her price. In response, the sibyl burned three of the books, then offered the remaining six books at the original high price. Again he refused. Of the remaining six books, she threw three more onto the fire, and repeated her offer of the final three books, at the original price. Afraid of seeing all the prophesy destroyed, he finally accepted.

These books, which foretold the future of Rome, became a famous source of power and knowledge and were stored on the Capitoline Hill in Rome. In 82BC, the books were destroyed in the burning of the Temple of Jupiter, and in 76 BC envoys were sent around the known world to rebuild the books of prophesy. The new books managed to make it until 405 AD, near the end of the Roman Empire [7].

The Cumaean Sibyl would later appear in the works of Ovid, on the ceiling of the Sistine Chapel, painted by Michelangelo, in Dante's *Inferno*, and in the poetry of TS Elliott. In his *Metamorphosis* (Book 14), Ovid tells of the Sybil's sad end. She ended up on the losing side of a deal with the god Apollo. Apollo sought her virginity, offering her a wish in exchange:

"I pointed to a heap of dust collected there, and foolishly replied, As many birthdays must be given to me as there are particles of sand.' For I forgot to wish them days of changeless youth. He gave long life and offered youth besides, if I would grant his wish. This I refused..."

Because of her refusal, he granted her wish in word, but not in essence, and she lived a thousand years without eternal youth. When Aeneas met her, she was 700 years old and still a virgin.

According to tradition she would have sung her prophecies, or written them on oak leaves which she would leave at the mouth of the cave.

Searches for the famous cave described by Virgil were undertaken in the Middle Ages, and there are other nearby niches that have also been named "the Sibylline grotto," including one closer to Lake Averno. The "official" Cave of the Sibyl was uncovered more recently, in 1932, by archaeologist Amedeo Maiuri, who was in charge of excavations at Pompeii and Herculaneum for

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many years. He was also responsible for the excavation the Villa Jovis on Capri. It is now thought to be of a later vintage than the cave described by Virgil, but a plaque by the entrance still labels it as the Sibyl's cave.

The shape of the cave indicates that it might have been Etruscan in origin, possibly cut by the Etruscan slaves of the conquering Romans around the 6th century BC (about the time of the story of the Sibylline Books). The passage has many entrances, though not the hundred mentioned, and is 5 meters high by 131 meters long, with several side galleries and cisterns.

The Sibyl's cave is very close to other famous Roman caves which lead to Lake Avernus, including the Crypta Romana and the enormous Grotta di Cocceio, a tunnel dug through the mountain to access the Lake, which is large enough for chariots to pass through. In the poem, Aeneas reaches the underworld at Lake Avernus by passing first through the Sibyl's cave, but in reality he would have needed to duck into a different one.

All of these literal gateways into the realm of shades have reinforced the long-held associations of this area of Southern Italy with the mythical underworld. The volcanically active region around Naples is known as the Campi Flegrei, or "Feiry Fields." Avernus was named as the opening to Hades by Virgil, but the area's bubbling sulphur pits and volcanic, brimstone-scented islands were also mentioned by early writers as portals to hell.

The Antro della Sibilla is now part of the Cumae Archaeological Site (Parco Archeologico di Cuma) [7].

In Ovid's *Metamorphoses*, the Cumaean Sibyl tells of her encounter with Apollo as she leads Aeneas through hell in search of the ghost of his father, Anchises. She tells Aeneas that when she was a girl Apollo had promised to give her whatever she wanted if only he could possess her. Testing him, she pointed to a heap of sand and asked him to grant her as many years in life as there were grains of sand. Apollo gave her the wish and told her that she could have eternal youth and beauty if she would agree to be his. She refused him, and as punishment, was forced to live out the 1000 years he originally gave her. But instead of staying young and beautiful, she aged and became uglier as time went by [51], Fig. 42.



Fig. 42. *Apollo and the Cumaean Sybil* (c. 1661) [51]. **Fig. 43.** *River Landscape with Appollo and the Cumaean Sibyl* [49].

Ovid's *'Metamorphoses'* (XIV, 129–153) tells of how the amorous Apollo offered the Cumaean Sibyl anything she desired. She is shown in the painting asking for as many years of life as there are grains of dust in her hands. Although Apollo

granted her wish, she still refused him her favours. In retribution, he denied her perpetual youth and she lived for over seven hundred years in increasing misery. Rosa's expressive brushwork, dark tones and dramatic chiaroscuro, together with his characterisation of the wild landscape of rocks and splintered trees, create a sense of foreboding and mystery in keeping with the melancholy story [49], Fig. 43.

Cumaean Sibyl was produced in 1510 by Renaissance artist Michelangelo. It remains today in the Sistine Chapel, Vatican, precisely where the artist had installed the fresco all those years ago. The overall display of work across the interior of the chapel is considered by many to have been one of the greatest achievements by any painter in history...[9], **see video [30]**, Fig. 44.

A sibyl is essentially a female prophet and Michelangelo wanted to make his Sistine Chapel display as inclusive as possible. As such, he includes a good number of famous sibyls within his network of frescos and also made attempts to cover a variety of ages too. The Cumaean Sibyl was specifically a priestess who ruled over a Greek colony called Cumae which can be found relatively close to Naples in southern Italy. Michelangelo would have spent considerable time in selecting his prophets and sibyls from a long list who exist from ancient literature. He would then attempt to portray them in a manner which communicated something about their own



Fig. 44. Cumaean Sibyl by Michelangelo, 1510.

lives within each artwork, normally through the use of symbolic objects which would each deliver a certain meaning for our benefit. In the example of this painting there is a large book which is being read by the main figure, and we can instantly identify this as a key symbolic addition that requires further investigation...

There is a huge cultural aspect to Renaissance art which we might not find in some of the more contemporary art that we enjoy today [9].

It is one of the most iconic symbols in all of fantasy, second only to perhaps a wizard's staff or a warrior's sword. A wizard's wand is what gives them their power. In the Harry Potter world (Fig. 45), or the Potterverse, a wand is a semi-sentient magical item that amplifies and redirects a wizard's magical power (**see the videos 76; 11**). In the first book we learn that it is the wand that chooses the wizard, though no one can really say why. What is



Fig. 45. The Harry Potter world.

understood though, is that while wands can be made of the same wood and the same core materials, no two wands are exactly alike (**see the video 73**). Even Harry's first wand was the "brother" to Voldemort's wand. The two had the same phoenix feather core, which is later revealed to be from Fawkes, Dumbledore's animal companion. On

paper, the creation of a wand seems pretty easy right? Get some magical wood and put something belonging to a magical creature in it and presto, wand? Well the process is a bit more involved than that. Today we are taking a deep dive into what makes a wand and what they do to better serve the magical world. This will include a history of wands, what makes a wand more powerful than another and how does a wand choose a master anyway? There is always a chance for theory crafting too. It's just a swish and a flick to get started (**see the videos [21; 36]**).

Garrick Ollivander is an old wandmaker – "the best" according to British witches and wizards – who runs Ollivander's on Diagon Alley (Fig. 46). He has eerie, moon-like eyes and makes Harry a bit uncomfortable, as he seems just as fascinated by the power of wands used for evil as those used for good. Ollivander remembers every wand he has ever sold, and greets people by rattling off the specifications of their wands. Garrick Ollivander comes from a long line of wandmaker Elm wands are sophisticated and capable of advanced magic. They also produce the "fewest accidents" and the "most elegant charms and spells"...



Fig. 46. Harry Potter and Garrick Ollivander



Fig. 47. Lucius Malfoy's elm wand.

Although purebloods prefer elm wands, Mr. Ollivander states that he has sold some to Muggleborns (**see the video [75]**), Fig. 45.

Lucius Malfoy's elm wand with dragon heartstring was taken from him by Lord Voldemort, and later destroyed by Harry Potter during *the Battle of the Seven Potters* when Harry's wand turned of its own accord and blasted the wand as Voldemort held it (**see the film [20]**), Fig. 47.

Voldemort: "...I understand better now. I shall need, for instance, to borrow a wand from one of you before I go to kill Potter. No volunteers? Let's see...Lucius, I see no reason for you to have a wand any more."

Lucius: "My Lord?"

Voldemort: "Your wand, Lucius. I require your wand" (Fig. 48).

– *Lord Voldemort to Lucius Malfoy in 1997 [27]*.



Fig. 48. Lord Voldemort.

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This wand belonged to Lucius Malfoy, head of the pure blood Malfoy Family. Noticeably, the wand was concealed within Lucius Malfoy's snake-headed walking stick, an heirloom of the Malfoy Family. The wand fit into the walking stick like a sword into a scabbard. Lucius was in possession of his wand/walking stick for the majority of his life, but when he was sent to Azkaban his son was seen in possession of the walking stick (though it is doubtful he used his father's wand much, rather continuing to use his own). After Azkaban, Lucius regained his wand, but it was taken by Lord Voldemort in order to solve Voldemort's problem with his and Harry's wand sharing the same core. It was destroyed during the Battle of the Seven Potters in Voldemort's possession.

Lucius Malfoy carried this wand through much of his life. It is unknown if he carried a different wand earlier in his career as a wizard, though it seems likely he would have gone through at least one or two wands before acquiring this one. Concealed within the serpent-headed walking stick, it acted as much as a symbol of his status as the tool of a wizard.

The wand was taken from him by Lord Voldemort in 1997 since the Dark Lord wanted to prevent *Priori Incantatem* from occurring between his own wand and Harry Potter's wand. After no volunteers presented themselves, Voldemort selected Lucius as an unwilling donor. Lucius reluctantly surrendered his wand after some prompting from his wife, identifying its wand wood and core for Voldemort's benefit. The Dark Lord examined it briefly before snapping off the silver snake head and tossing it contemptuously onto the tabletop; both acts being intended to spite Lucius and demonstrate the favour he had lost with Voldemort. Voldemort's first use of the wand was to awaken Charity Burbage, the former Muggle Studies Professor at Hogwarts who was present as a prisoner. After taunting her for a brief time, Voldemort then used the wand to cast the Killing Curse ending her life [27].

Elm wands were said to be highly desirable to pure-blood supremacists, making it ideal for a Malfoy family heirloom [95].

Voldemort was assured by Mr. Ollivander that if he used a different wand against Harry then there would be no repeat of the *Priori Incantatum* effect as in the Riddle graveyard from the twin phoenix feather wand cores (**see the film [39]**). So the Dark Lord was furious that Harry's wand destroyed the elm wand anyway. Dumbledore explained in "King's Cross" that Harry's holly-phoenix wand had absorbed some of the Dark Lord's essence in the graveyard and saw him as a threat, so Lucius's wand or wand core had nothing to do with the way Harry's wand reacted during the Battle of the Seven Potters:

"So your wand recognized him when he pursued you, recognized a man who was both kin and mortal enemy, and it regurgitated some of his own magic against him, magic much more powerful than anything Lucius's wand had ever performed. Your wand now contained the power of your enormous courage and of Voldemort's own deadly skill: What chance did that poor stick of Lucius Malfoy's stand?" [73], (**see the film [20]**).

In this way we can make some Harry Potter crafts (**see the video [53]**).

Finally, our trip to studying the American Elm ended so unexpectedly: we remembered Harry Potter and the elm wand.

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