The Jeffersonian Architecture of the Rotunda as a Means to Understand the American Declaration of Independence (July 04th, 1776)

الهندسة المعمارية الجفرسونية لروتاندا كوسيلة لفهم وثيقة اعلان الاستقلال الأمريكية (04 جويلية 1776)

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Abstract:

This paper aims at approaching a historical document through the architectural aspects of a building. It interprets the American Declaration of Independence through the Jeffersonian architecture. It demonstrates the links between the geometric patterns of a building and the written form of the message, the text. It draws the links between both different forms of communication through the epistemological approach and the comparative method. Firstly, our orthographic drawing of the Rotunda's geometric patterns revealed that the latter's architecture was based on unity and harmony. Secondly, applying both architectural ideals on the American Declaration of Independence, this study concluded that the colonies argued their separation through the same neoclassical principles of unity and harmony found in the neoclassical architecture of the 17th and 18th centuries.

Keywords: Rotunda library of Virginia university; American Declaration of Independence; Architecture; Unity; Harmony.

الملخص:

تسعى هذه الورقة البحثية إلى توضيح إمكانية تفسير وثيقة تاريخية من خلال الجوانب المعمارية للمبنى. وكمثال على ذلك، تؤول وثيقة إعلان الاستقلال الأمريكية من خلال

العمارة الجيفرسونية. يوضح هذا المقال الروابط بين الأنماط الهندسية للمبنى والشكل المكتوب للرسالة. يختبر عملنا البحثي فرضية قراءة وثيقة تاريخية من خلال الجوانب المعمارية للمبنى. لهذا، استخدمنا المنهج المعرفي وكذلك اسلوب المقارنة. يبين هذا المقال الروابط المعرفية بين الهندسة المعمارية لمكتبة جامعة فرجينيا (روتاندا) ووثيقة اعلان الاستقلال (باعتبارهما أشكالا من وسائل التواصل). أولاً، استنبطنا من خلال رسمنا للأنماط الهندسية لمبنى مكتبة *Rotunda* أن الهندسة المعمارية للأخيرة كانت قائمة على أسس الوحدة والانسجام. ثانيًا، بعد اسقاطنا لهذه المثل المعمارية على وثيقة إعلان الاستقلال الأمريكية، خلصت هذه الدراسة إلى أن المستعمرات جادلت انفصالها من خلال نفس المبادئ الكلاسيكية ،الوحدة والانسجام، الموجودة في العمارة الكلاسيكية الرائجة إبان القرنين السابع عشر والثامن عشر.

كلمات مفتاحية: مكتبة جامعة فرجينيا (روتاندا)؛ وثيقة إعلان الاستقلال الأمريكية؛ الهندسة المعمارية؛ الوحدة؛ الانسجام.

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1. INTRODUCTION

According to archaeological researches, drawing constituted a significant tool for man to transmit his messages since the prehistoric period. Likewise, contemplating at a masterpiece in the Louvre Museum, one can translate his interpretation of the painting into written words. This demonstrates the connection that exists between images and words and vice-versa. Indeed, cultural movements such as Classicism and Modernism involve different areas such as visual arts, literature, architecture, philosophy and music. For instance, Neoclassicism influenced architecture and political philosophy during the 18th century. Thomas Jefferson's writings reveal neoclassical ideals that can easily be identified by critics of different disciplines. In this sense, we conducted our research to delineate

the interaction between architecture and historical documents in Jefferson's neoclassical thinking.

To accomplish our study, we approached the American Declaration of Independence (July 4th, 1776) through the Jeffersonian architecture. In other words, this study interprets the Declaration using the neoclassical ideals that we depicted from Jefferson's architectural design of the Rotunda, particularly, the south elevation view. We selected both works for two major reasons. First, Jefferson was the principal author of the Declaration. The latter argued the separation of the colonies from the British through a set of philosophical principles that were imports from the neoclassical European philosophies. Second, Jefferson designed the Rotunda library relying on books of neoclassical architects. In essence, this research paper combines both disciplines of architecture and interpretation of historical documents. It answers the following question: How can we interpret the philosophical ideals of the Declaration of Independence relying on the Jeffersonian architecture?

To deduce the neoclassical ideals that influenced Jefferson in designing the Rotunda, this research relies on a variety of classical books of European architects that were published in the 17th and the 18th centuries. In this regard, we used Thomas Jefferson's original scanned architectural drawings to study the structural design of the Rotunda. Likewise, we relied on the writings of the fathers of neoclassical Architecture like Pollio Vitruvius' treatise *The Ten Books on Architecture* (27 BC), Leon Alberti's *On the Art of Building in Ten Books* (1452) and Andrea Palladio's *The Four Books of Architecture* (1570) to uncover the neoclassical origins of Jefferson's design of the Rotunda. Moreover, we used Etienne-Louis Boullée's notes Architecture, Essay on Art (annotated by Helen Rosenau in 1953) and Anthony Vidler's *Claude-Nicolas Ledoux* (2021) and Rachel Fletcher's study An American Vision of Harmony: Geometric Proportions in Thomas Jefferson's Rotunda at the University of Virginia (2003) to interpret the naturalist and neoclassical ideals of the Rotunda. Then, we identified the philosophical background of the Declaration using recent

studies such as Kody W. Cooper and Justin B. Dyer's Thomas Jefferson, Nature's God, and the Theological Foundations of Natural -Rights Republicanism (2017).

To depict the philosophical principles of the Jeffersonian architecture of the Rotunda and those of the Declaration, this paper uses the epistemological approach. Besides, it relies on the comparative method to trace the analogies between both works. Further, this research applies the Jeffersonian architectural features on the Declaration. Through an analytic approach, it interprets the political philosophy through which the founding fathers claimed the colonies independent.

To answer the research question, this study is divided into three main parts. First, it depicts and studies the architectural structures of the Rotunda. Then, it delineates the philosophical background of the Declaration. Finally, it applies the Jeffersonian neoclassical architectural principles of unity and harmony to interpret the political philosophy of the Declaration. The present paper concludes that the Declaration argued the separation of the colonies through the philosophical ideals of Unity and Harmony. By tracing the links between the Jeffersonian architecture and the Declaration, our study confirms the hypothesis of reading a historical document through architecture.

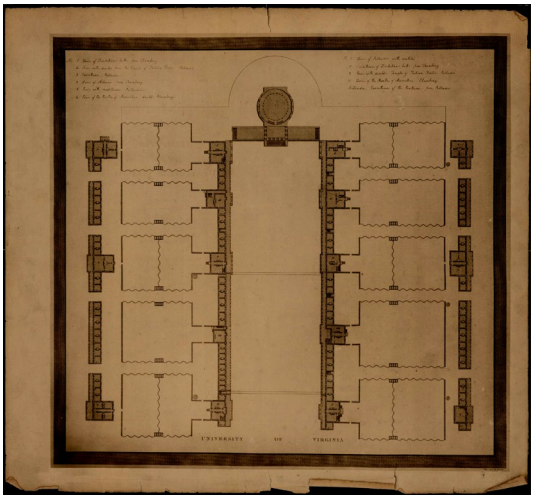
2. Identifying the Architecture of the Rotunda Library

2.1 The Historical Background of the Rotunda

This section delineates the historical background of the Virginia University. Then, it defines its architectural style from a structural perspective. Thomas Jefferson was a founding father and the third president of the United States. He authored the Declaration through which he argued the separation of the colonies from the British rule. He defended the rebellions in the colonies with a set of political and economic grievances and with philosophical ideals as well. According to historical records, Thomas Jefferson studied naturalist philosophy and mathematics at the college of William and Mary in Virginia in 1760. He was influenced by the Enlightenment philosophers of the 17th and 18th centuries (Wilson, 2018).

Along his academic studies at Williamsburg, Jefferson studied Law too. In addition, he was a self-educated architect. He had no formal education in architecture; however, he devoted long years at the acquisition of classical and neo-classical architecture. In this sense, the catalogue of his personal libraries reveals a significant number of architecture books that influenced his design of the University of Virginia (Wilson, 2018). Thomas Jefferson possessed the largest library of architecture books. Passionate about architecture, he designed the Rotunda and the Monticello that became symbols of colonial architecture in the United States.

Fig.1. The Ground Plan of The University of Virginia 1822



Source: Encyclopedia Virginia, 2022

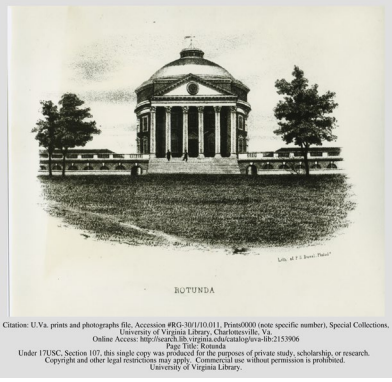
Besides, Jefferson designed the Academic Village based on neo-classical architecture. As shown in fig. 1, his village had a U shape design and composed of a faculty building, students' housing, a library and other halls and spaces for dinning. His university project started as a project to improve public education. Jefferson's Academic Village architecture constituted from nine pavilions that contain teaching quarters and teachers' lodgings. They were connected by students' rooms. Because of its U-shaped design, it enveloped a large lawn. The construction works of the pavilion VII started on October 1817. Jefferson collaborated with two architects to

accomplish the design of the Academic Village -William Thornton and Benjamin Henry- who fundamentally influenced his architectural plans. Following the orientations of both architects, Jefferson modified the plans of the Academic Village. For instance, he designed the library -the Rotunda - that occupied the head of the buildings of the university. It was the largest building of the village. In 1822, Jefferson published the first version of the Virginia university design, known as the Maverick plan. The construction works of the university of Virginia lasted long years until Jefferson's death in 1826 (Brandt, 2020).

2.2 Defining the Architectural Structure of the Rotunda (South Elevation View)

Rotunda is the library building of the University of Virginia. Its construction started from 1823 and achieved by 1826 after the death of Thomas Jefferson. The Rotunda centers the Academic Village, as shown in fig.1. Moreover, its construction overall costs reached $57.773 during Jefferson's time, with the value of $992.729 in 2006. It was classified an international heritage site (Peckham et. al., 2017). Rotunda heads the Academic Village and centers the university (see fig. 1). This aspect was Benjamin H. Latrobe's suggestion for Jefferson. Latrobe claimed to Jefferson that it would be preferable to build the library with a dome at the center of the Academical village heading the lawn (Brandt, 2020).

Fig.2. The Elevation View of The Rotunda Drawn in 1846 by Peter S. Duval



Source: Peckham et. al., 2017

Besides, architecture historians viewed that Jefferson's Rotunda was a reproduction of the Roman Pantheon using the Palladian measurements. Andrea Palladio (1508-1580) was an Italian Renaissance architect. His architectural projects were substantially famous for their Greek and Roman styles. He published his book *I Quattro Libri Dell's Architettura* in 1570 by which he gained fame too. In 1716, John Watts translated the book into English. However, our research uses Isaac Ware's translation that was originally published in 1738. In his book, Palladio exposes the design of the Roman Pantheon, also known with the *Rotunda*. The latter served as a temple and it was built in 14 A.D. Nevertheless, in book IV, chapter XX, Palladio assumed that the temple was established during the Roman empire era (Palladio, 1965, p. 493). According to the illustrations L, LII and LIII, the sanctuary was structured with columns of the Corinthian order. Both the dome and the portico constituted the main noticeable parts of the building (Palladio, 1965, p. 498). Contemporary architects assume that Jefferson intended to design a small version of the Pantheon. They view that he recreated the Roman style of sanctuary through the Rotunda by adapting the latter's dimensions to suite the pavilions of the University of Virginia. Besides, the following statements summarize Francesca Miller's comparison between Jefferson's Rotunda and the Pantheon:

- Jefferson's Rotunda measures 1/4 of the Pantheon's area and has 1/8 the Pantheon's volume.
- Rotunda's portico measures 50 feet by 28 feet and 6 inches; however, the Pantheon's portico has 108 feet by 42 feet.
- Rotunda is shorter than the Pantheon.
- Rotunda has 6 Corinthian columns supporting the portico lesser than the Pantheon.
- Similar to the Pantheon, Jefferson's Rotunda was designed with a dome. The latter was imported from the Roman classical architecture and symbolizes the Heavens (Miller, 2010, p. 8).

Besides, illustration number LI (book IV, chapter XX) in Palladio's book reveals firm similarities between the Roman Pantheon's ground plan and Jefferson's floor plan of Rotunda (Fletcher, 2003, p. 20). In her study The Origins of Thomas Jefferson's Academical Village at the University of Virginia (2010), Francesca Miller emphasized the Roman classical architecture influence on Jefferson's Rotunda. She claimed: " The replica of the dome of the Pantheon ... became the site of a planetarium for the University at Jefferson's request. This act alone illustrates Jefferson's desire to stay as true to the Roman models possible " (Miller, 2010, p. 8).

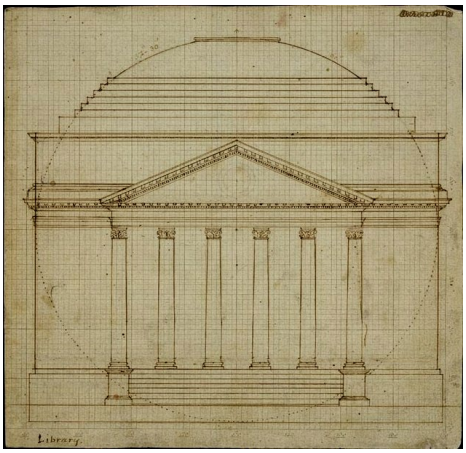
3. Identifying the Architectural Philosophy of Jefferson's Rotunda

This section aims at discerning the architectural philosophy that Jefferson used when designing the Rotunda. As a step to delineate the philosophical principles of Rotunda, this research focuses particularly on the south elevation view for two main reasons. First, the view represents holistic architectural picture similar to that of the Pantheon. Second, the holistic view provides us with the necessary data that make the deduction of the philosophical principles easier and more practical.

For scientific considerations, we used a scanned copy of the original architectural drawing made by Thomas Jefferson himself. We avoided using the reproduced versions made by contemporary architects -electronic and handmade- to assure credibility to our research work. Further, we used the following materials to reveal the philosophical principles of the Rotunda: a scanned copy of Jefferson's original drawing of the south elevation view, the tracing-paper, a compass, decimal and a pen.

As shown in fig. 3, the present document represents the architectural drawing made by Jefferson in 1819. He used black ink and pencil on a paper BD with the dimensions of 17-1/4 x 8-3/4 inches. The document is preserved at the University of Virginia. It demonstrates the front elevation from the south. Likewise, it shows the Dome, the portico, the modillions and the Corinthian columns (Encyclopedia Virginia, 2020).

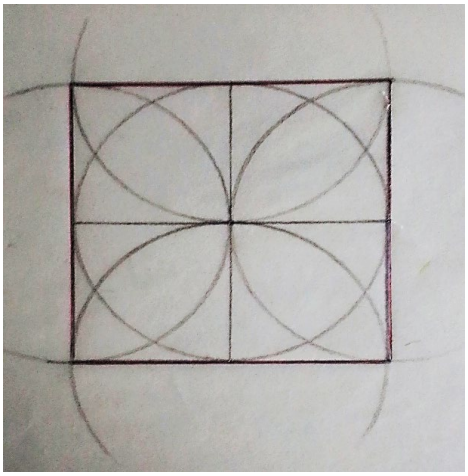
Fig.3. Thomas Jefferson's Drawing of the South Elevation of The Rotunda



Source: Encyclopedia Virginia, 2020

Jefferson drew the Rotunda elevation and plans at 1:10 scale on grid paper as 1 square of grid=1 square foot. The document shows pencil traces and marks of erased lines and circles. They serve as guidelines for us to track Jefferson's patterns and lines through which he drew the elevation. Using a compass, we drew a semi-circle to complete that of the dome. Then, we got a full circle. In this sense, it is clear that Jefferson used a dotted circle when designing the dome. Further, the circle surrounds the exterior face of the dome. Besides, we traced another circle starting from the central point we got from the intersection between the vertical radius and the dome. Henceforth, we got two axes (vertical and horizontal). Likewise, we repeated the same pattern of circles on the other three sides of the elevation. In the end, we got four axes. Geometrically speaking, a square shape was produced enveloping the full circle of the dome. The following illustration represents the final patterns we got from our orthographic drawing.

Fig.4. The Geometric Proportions of the Rotunda



Source: The drawing was realized by the author

As shown in the orthographic drawing, the patterns we got from the elevation are similar to those realized by Leonardo Da Vinci; more precisely: the Vitruvian Man. The latter is composed of a set of proportions. The length of man's forearm is equal to the width of his chest. In other words, man's body submits to a set of mathematical ratios. For example, the center of the standing body equals the total span arm length. Also, the length of spread two arms equals the height of man. The hairline to the bottom of the chin equals 1/10 of man's height. The shoulders equal 1/4 of man's height and the length of the hand equals 1/10 of man's height. In addition, a palm equals 4 fingers and a foot equals 4 palms. Then, man's height equals 24 palms (Strongman, 2010, p. 219).

Further, applying the canon of proportions to the Vitruvian man, one gets into the following measurements. The length of the body lowers by 1/14 if the two legs are open. In this sense, the space between the two open legs forms an equilateral triangle. The main principle of the Vitruvian man is that beauty derives from the harmony between the different parts of the body. Thus, the human body is measured in accordance to its different parts that constitute, in turn, a harmonious unity. Its measurements are revealed

through geometrical patterns. This principle had already been well developed by Marcus Vitruvius (75 BCE - 15 BCE). In essence, in his *The Ten Books on Architecture*, Vitruvius assumed that the human body constituted an ideal reference to architecture. Explicitly, he argued that the canon of proportions can be used as guidelines to determine the proportions in architecture. He asserted that the use of mathematical principles to measure the human body can be used in terms of units to measure the architectural drawings too. For example, the human body measures 8 heads height. Likewise, in architecture, the architect measures the wall's height through a unit. For him, an ideal architectural work should have three main bases; these are: *firmitas* i.e., firmness, *utilitas* i.e., commodity and *venustas* i.e., visual delight (Vitruvius, 2005, p. 93).

Indeed, Vitruvius's proportional relations of units (between different parts of the same entity) are involved under the concept of harmony. The Vitruvian Man of Leonardo Da Vinci demonstrates the principle of harmony through the concepts of the circle and the square. The drawing reveals a standing man inside the two different shapes: the circle and the square. It purposes to illustrate how to square a circle and how to create a square by using the area of the circle. This technique is used by Thomas Jefferson in his architectural drawing of the Rotunda. Our orthographic drawing (see fig. 4) unveiled the Vitruvian technique of the square and the circle. Philosophically, the circle symbolizes spirituality and human phenomenality (Strongman, 2010, p. 220). The elevation of the Rotunda is established on the circle that surrounds the dome to the bottom and the square that encloses the circle. This demonstrates the principle of harmony in Jefferson's architectural philosophy. Likewise, the different parts of the portico and the dome and the measurements through the radius constitute the principle of unity. In this regard, Vitruvius defined harmony as follows: "Similarly, in the members of a temple there ought to be the greatest harmony in the symmetrical relations of the different parts to the general magnitude of the whole " (Vitruvius, 2005, p. 95).

Similarly, the Italian architect Leon Battista Alberti (1404-1472)

emphasized in his *The Ten Books of Architecture* (1485) the significance of harmony to determine the beauty of a building. In book IX, chapter VI, he claimed that through mathematics architects measure the geometric proportions of architectural drawings. This proportions' technique is inspired from nature, more precisely the human body. He asserted: "These several Rules … are the natural and proper Relations of Numbers and Quantities ... that the shortest Line be taken for the Breadth of the Area, the longest for Length, and middle Line for the Height" (Alberti, 1986, p. 199). In essence, the principle of harmony represents the gathering of the similarities between the different parts of a whole entity; the principle of unity refers to the oneness of different parts of a body that serve a common purpose. In the following section, this study will apply both architectural and philosophical principles to interpret the philosophical background of the American Declaration of Independence.

4. Interpreting the American Declaration of Independence through the Rotunda's Geometric Patterns

The Declaration of Independence is a historical document that was drafted in 1776. The present document was subjected to several revisions as many expressions were omitted. Historically, Richard Henry Lee -Virginia delegate- addressed the Three Resolutions Respecting Independency in June 1776. According to historical records, the Declaration's pleas for separation resulted from several colonials' meetings where they discussed and argued against George III's economic and political acts. Moreover, several colonial delegates raised their voices calling for the separation of the colonies from the British Crown and Parliament. On June 12th, 1776, Congress passed an agreement to establish a writing committee to draft the causes which stirred the colonies to rebel. It purposed also to declare the colonies free to maintain economic, political and diplomatic conventions on the international level (*The Declaration of Independence in Historical Context*, 2014, p. 461). The writing committee was conducted by Thomas Jefferson, Benjamin Franklin, Roger Sherman, Robert R Livingston and John Adams who emphasized the Declaration's grievances (*Encyclopedia of*

American Historical Documents, 2005, p. 287).

Besides, the present document is divided into five thematic sections. It starts with a title opening with the word unanimous that shows that the content of the document was consented by all the signers. The document opens with a preamble claiming the independence of the colonies with philosophical connotations. The second part claimed the British rule over the colonies tyrannical for political and historical considerations referring to philosophical ideals. The third part sets grievances to qualify the British economic acts merely tyrannical. The fourth part is a concluding statement that emphasizes the colonies' unanimous consent to rebel and declare the colonies independent states referring to philosophical beliefs. The fifth and the last part contains the signatures of the Congress delegates.

This research paper emphasizes the philosophical background of the Declaration and does not aim at discussing it from historical or political perspectives. It focuses at discerning its philosophical ideals and then interprets them basing on the architectural philosophy of the Rotunda. It is important to note that this research work starts from the premise that the Declaration involves a philosophy and that it is not only a historical document that defended the separation of the colonies from the British authority with economic and political pleas. Instead, it carries a philosophy that intersects with the Jeffersonian architectural philosophy. The table below demonstrates our classification of the Declaration's background depending on both philosophical principles of Unity and Harmony.

Table 1. Unity and Harmony in the American Declaration of Independence

Unity	**Harmony**
– "In the Course of human Events", "The Powers of the Earth", "The Laws of Nature", "And of Nature's GOD", "Opinions of Mankind", Causes which impel them to the Separation", "CREATOR", "Opinions of	– CREATOR – Nature

Mankind", "Unalienable Rights" (*American Soul*, 2012, p. 3). – "The representatives of the UNITED STATES OF AMERICA", "Supreme Judge of the World", "People of these colonies", "Protection of DIVINE PROVIDENCE" (*American Soul*, 2012, p. 6).	– Mankind

Source: The author's categorization

The table above exposes the philosophical expressions in the Declaration. It classifies them into two architectural philosophical principles of Unity and Harmony. The latter are imports from classical architecture, Roman and Greek in particular. As shown in the previous section, unity refers to the different parts pertaining to different entities that work for the same cause or statement. However, harmony refers to the similarities that exist between distinct elements that work for a common statement. Firstly, the elements that are involved under the principle of Unity can be reorganized hierarchically. We start from the basis which includes the following elements: People of the colonies, representatives of the United States, the powers of the Earth, Mankind, human events (*American Soul*, 2012, p. 3). These elements are involved under the human sphere of influence, i.e., matters that man can control or influence. Secondly, the terms Natural Laws, the laws of Nature's GOD, the Supreme Judge and CREATOR are involved under the sphere of the Divine. Both spheres Human and Divine are different in composition and mechanisms. More importantly, both are composed of different elements in turn. However, the authors of the Declaration used them to argue one common statement which is the separation of the colonies. This embodies the philosophical principle of Unity. The relationship between the elements of both distinct spheres shows a hierarchical structure that starts from the base, human, and elevates to the top, the Divine, that all justify the independence of the colonies.

Secondly, this study distinguished between three main elements that are combined with the principle of Harmony; these are: Creator, Nature and

Mankind. The first two elements are involved under the sphere of the Divine; whereas the last one is involved under the human sphere. The Declaration emphasized that the Divine and the human elements were interrelated and it claimed them harmonious with the separation of the colonies. In this sense, it states: "WHEN, in the Course of human Events, it becomes necessary for one People to dissolve the Political Bands which have connected them with another … to which the Laws of Nature and of Nature's GOD entitle them" (*The Declaration of Independence in Historical Context*, 2014, p. 490).

The following expressions refer to the elements of both spheres. Though they have different meanings, the authors of the Declaration related them to harmonize with a common purpose; which is the independence of the colonies. The expressions "human events, one people, the Powers of the Earth and opinions of Mankind" have different meanings; however, they pertain to the human sphere. Moreover, "Laws of Nature and of Nature's GOD" have different meanings too. The former refers to the set of philosophical laws that were deduced from Nature through the human reason. On the other hand, the laws of "Nature's GOD" refer to Nature itself which is divine, in other words, God himself. These concepts were imports from the European deistic philosophy of the 17th and 18th centuries. In this regard, the Dutch philosopher Benedict Spinoza (1632-1677) identified divinity with nature. He also claimed human reason as the ultimate means through which man depicts the mechanisms of social, political and economic domains. He argued that the latter ought to be deduced from nature through the human reason. Likewise, in his *Ethics* (1677), he viewed that nature was divine and beautiful; thus, it was perfect. Its laws can be understood through observation and experimentation (Spinoza, 2001, p. 35). Similarly, the Declaration stated that the rebellion and the colonies' separation from the British authority were deduced from nature and its laws rationally (*American Soul*, 2012, p. 3). Philosophically speaking, according to the Declaration, the British presence in the colonies was irrational and thus *contra natura*.

From an architectural perspective, the statement of the perfection and beauty of the Divine sphere was elaborated by the French architects of the 18th century, particularly Etienne Louis Boullée (1728-1799) and Claude - Nicolas Ledoux (1736-1806). Both architects developed the concept of *l'Architecture Parlante*. Ledoux's idea of the sublime in architectural concept reflects the harmony between the natural, the divine and the human. His design of the cemetery in the city of Chaux is characterized with geometric forms that tend in turn to speak to the viewer about the infinite. Explicitly, the cemetery has a half-buried spherical shape. The sphere aims at giving the impression of vastness and infinity where the dead spirits could rest. Ledoux inspired this imagery from the metaphysical world of the dead who -according to legend- live in community with heavenly entities. The half-buried sphere symbolizes a half-view of the earth surrounded by clouds on which the dead and the supernatural entities dwell with the astrological signs as well. This image or heavenly scene was portrayed by Ledoux in his *l'Architecture Parlante* (Vidler, 2021, p. 143).

Similarly, Etienne-Louis Boullée emphasized the relationship between architecture and language through his concept of *l'Architecture Parlante*. He viewed that nature and the divine were infinite and immeasurable. Thus, they are non-representable. Likewise, Boullée viewed that architecture can represent the inconceivable through a geometric language. He argued that architecture created harmony between the divine, nature and the humans. These elements are different in essence but can be made harmonious through geometric shapes such as the sphere in Ledoux's cemetery. All in all, Boullée's view to architecture is based on utopia and the fact that the building demonstrates its identity and function through structural attributes (Boullée, 1976, p. 106). Later, Jefferson adopted both architects' vision of utopia in designing the Rotunda. As shown in fig. 2, the dome of the Rotunda is half- spherical; this shape symbolizes eternal life, infinite realm of Heavens and the opening that relates the human world with the Divine. This utopian vision was inspired by neoclassical and Renaissance architects from the Roman and Greek architecture.

To conclude with, this research paper demonstrated through an

epistemological approach and by discerning the Rotunda's geometric patterns that the relationship between architecture, nature, the divine and humans is represented by the Declaration of Independence as a unity that harmonized with the colonies' pleas for independence.

5. CONCLUSION

This research work purposed to test the hypothesis of understanding a historical document using architectural drawings. For this, we selected the American Declaration of Independence **(**July 4th 1776) and the Jeffersonian architecture, particularly the Rotunda for our study. We used the epistemological method to study the philosophical principles of both works. First, we unveiled the geometric proportions of the south elevation of the Rotunda. Our orthographic drawing of the elevation revealed the geometric patterns of square and circle. The latter are imports from Leonardo Da Vinci's the Vitruvian Man. Then, we approached the Declaration using the philosophical ideals deduced from the Rotunda's geometric patterns.

This research concluded that the Rotunda was designed based on both ideals of Unity and Harmony. Our approach to the Declaration using these principles revealed that the colonials argued their separation from the British Crown and Parliament based on the neoclassical philosophy of naturalism. It demonstrated that the Founding Fathers supported their claim for independence by harmonizing the concepts of Nature, the divine and Mankind with the colonies' claim to separation. It also revealed that the Declaration argued independence through a set of expressions imported from both platonic spheres of divinity and humanity. Moreover, applying the Jeffersonian architecture of the Rotunda to interpret the Declaration revealed that both works were founded on neoclassical ideals of Unity and Harmony. Practically, the findings of the present research work contribute to developing further approaches of interpreting historical documents using architectural aspects of buildings.

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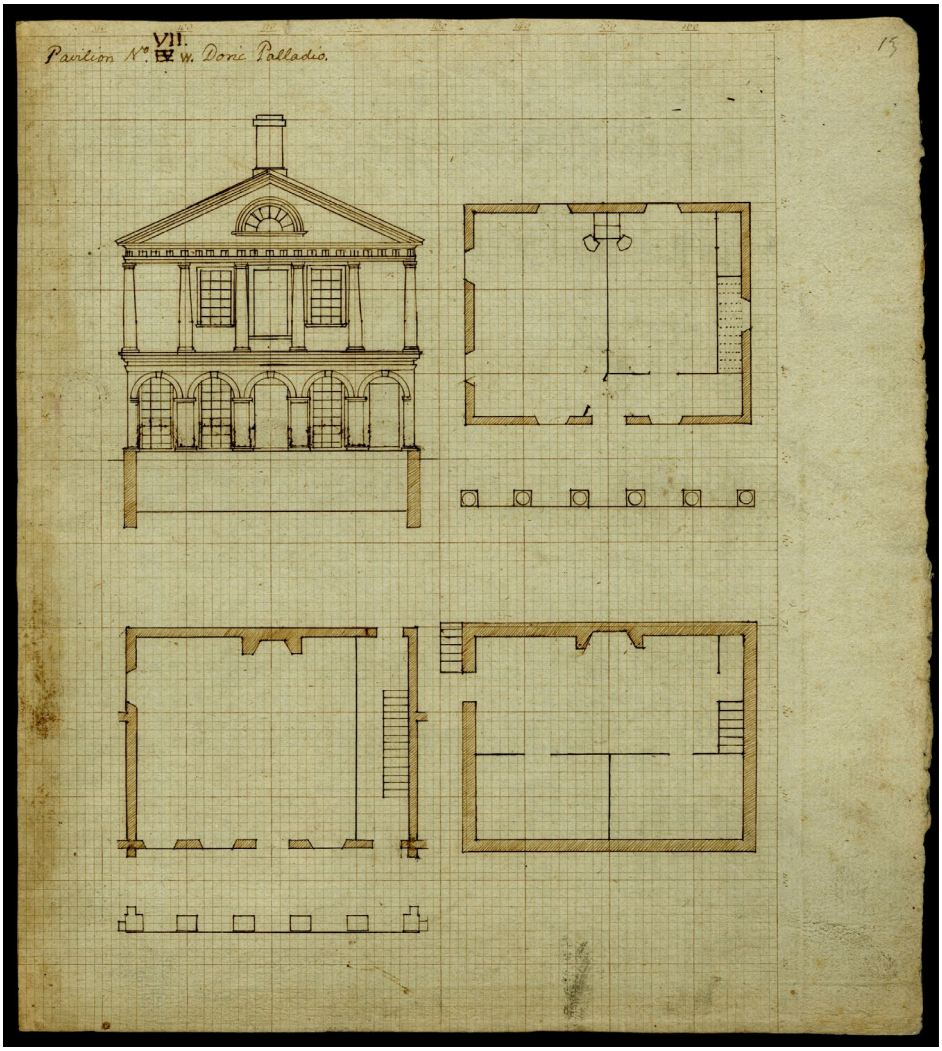
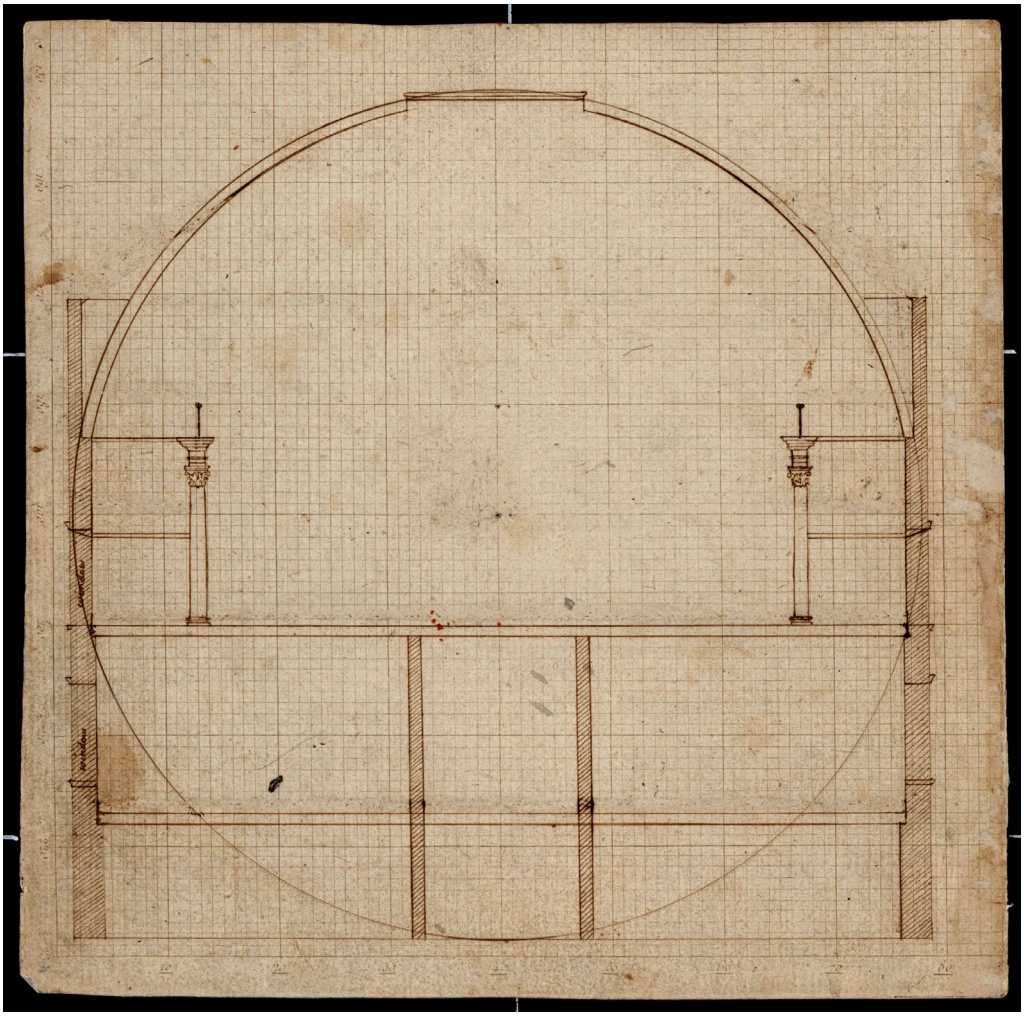
7. Appendices

Appendix 1: Jefferson's architectural Drawing of The University of Virginia (The Front Elevation and Floor Plans of Pavilion VII)



Source: Encyclopedia Virginia, 2020

Appendix 2: Thomas Jefferson Plan for The University of Virginia's original Library (the Rotunda)



Source: Encyclopedia Virginia, 2020