



# KENWOOD HOUSE

Robert Adam

Negin Moradi Gheisvandi  
K1722849

2019 - 2020 BA Hons  
AR6001 / AR6003 Dissertation



# INDEX

Introduction	P. 5
Chapter One	P. 7
-Location	
-Sculpture at Kenwood	
-History of Kenwood	
-Architecture Language of Kenwood House	
-Structure & Material of the Façade	
-Kenwood House Tenants and Events	
Chapter Two	P. 21
- Kenwood House Elevations	
-1.20 Pencil Drawing	
-Kenwood House Sections	
-Kenwood House Plans	
Conclusion	P.33
Appendix	P.35
Bibliography	P.52
Image Referencing	P.56

# Introduction

---



Is that time which creates an architecture style! Or is it the architecture style which forms over time?

The architecture style of Kenwood House is quite complicated. At the very first, this Villa was built in 1616 by previous owners, then Robert Adam started to redesign and add on to the rest of the building in 1754. Of course, the fact that the building was completed over several decades, allowed for a complicated style and this is what makes this building very interesting.

The very first style which comes to mind, is Palladian style. However, the actual style of Kenwood house is Georgian. As Palladian architecture and Georgian architecture had appeared around the same time, both styles are very similar.

Kenwood House is a Villa in Palladian architecture style which was designed by Robert Adam for Lord Mansfield and his family as a weekend and summer villa. An exciting account of former residents of the Kenwood house reveals famous personalities and individuals such as William Murray who was the first Earl of Mansfield and Lord Chief Justice and his prodigious niece, Dido Belle. Lord Mansfield, mentioned by Walpole as a patron, was, of course another Scot of great influence for whom Robert Adam worked. (Lees-Milne, 1947)

Robert Adam remodelled Kenwood house between 1764 and 1779 to give it the appearance that has since remained memorable and available serving precisely to the amazement of any lucky individual(s) to take a glance at the interiors and the general architecture of the creation. The Mansfield family have over generations assumed occupancy of the Kenwood house from the 18th century until the 20th century.

Prior to the very first house which was built on this land in 1616 by the King's Printer, "John Bill" this villa was passed through several hands and has been rebuilt several times before, William Murry bought it in 1754.

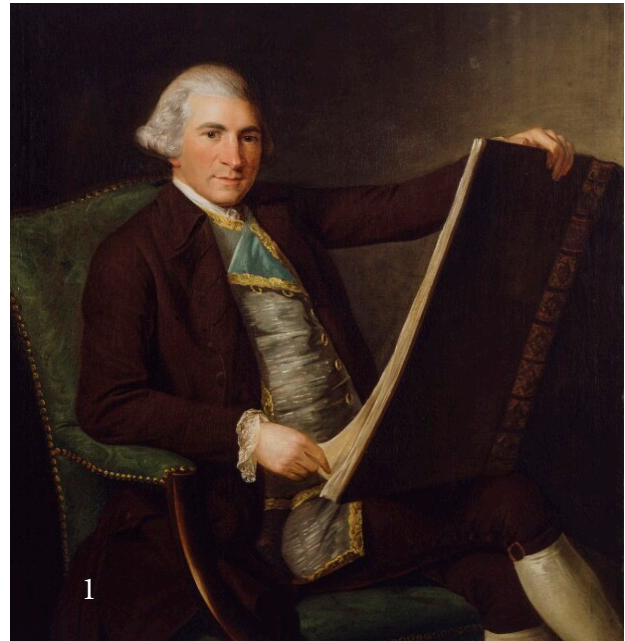


Fig 1. Portrait of Robert Adam in middle age, reputedly by John Zoffany. Formerly at Blair Adam Portrait by George Willison

Fig 2. William Murray - Portrait Photograph by the Author.

After William Murry's death, this house was passed to his nephew David Murry, who was the 2nd Earl of Mansfield. David Murry also decided to continue with the work of the house, by employing Humphry Repton to remodel the grounds. The dairy was completed for the 2nd Earl and countless of Mansfield by 1796; it has now been reopened to the public. (Laura Houliston and Susan Jenkins, 2014)

The later earls of Mansfield did not visit Kenwood as much as William Murray and David Murray preferring Scone Palace, their seat in Scotland instead. By the beginning of the 20th century, the Grand Duke Michael Michaelovitch of Russia, grandson of Tsar Nicholas I, and his family resided in Kenwood.

The 6th Earl of Mansfield, Alan Murray decided to sell the house in 1910. The house was bought by Edward Cecil Guinness, who was the 1st Earl of Iveagh in 1925. Presently, a spectacular collection of old master paintings are housed in Kenwood House, a significant number to which was bequeathed to the nation by Lord Iveagh plus the estate and the house itself. Masterpieces by distinguished artists of all time and throughout the centuries such as Vermeer, Gainsborough, Rembrandt, Turner and Reynolds comprise the gallery among other notable artworks. We have to thank Edward Cecil Guinness for this remarkable collection which we could freely available, and we can access today in Kenwood house.

Kenwood became home to part of his collection. After his retirement, during the refurbishing of his house in Hyde Park Corner, London; Edward Cecil Guinness began accumulating his collection in earnest. Most of his collection, donated after his death in 1927, is now open to the public in Kenwood, Hampstead, north London.

Kenwood House is now under the care of English Heritage. This house underwent a significant refurbishment during 2012 and 2013 and today allowing visitors to appreciate the collection in a more authentic 18th-century setting. (Laura Houliston and Susan Jenkins, 2014)



*Fig 3. Edward Cecil Guinness  
1st Earl of Iveagh - Portrait  
Portrait by Sir Arthur Stockdale Cope*

# Chapter One

---





Kenwood House lies on the boundary of London Hampstead Heath which makes it stand out among London's hidden gems enclosed within serene landscaped botanical gardens. The interiors comprise of breathtaking and capturing display of art, perfection, choice, and design all exquisitely summoned mutually and sufficiently.

Hampstead and Highgate were not part of London until 1888 and Kenwood House was a weekend and summer villa for the Mansfield family. William Murray, (the first Earl of Mansfield and a well-known Lawyer and Politician), had to be in London or close to London most of the times. Therefore, he had chosen this villa as it was not that far. He bought Kenwood as his weekend and summertime house, and commissioned Robert Adam to give it the Neo-Palladian appearance he always wanted. Robert Adam was the one who did most of the façade works, pediment on the columns and the rest of the building.

Kenwood House was only four to four and a half miles away from the centre of London, an hour or an hour and a half to get to there by horse ride. Despite the fact that most places in London are relatively small, Kenwood House is somewhat a

large estate; its boundaries stretch from Hampstead Lane in the north, and Highgate Bridge in the east to Royal Free Hospital in the south.

Predominantly, north London is situated at a higher altitude than the rest of the city. As a result, the prevailing winds coming from the east and the west would not let the terrible stench smoke blowing up from London get into the building.

Kenwood house is placed within 112 acres of leafy meadows popular for its awe-inspiring views over London, snaky woodland paths and the collection of fine sculptures such as the two-piece reclining figure by Henry Moore, Flamme by Eugene Dodeign, and Monolith Empyrean by Barbara Hepworth, just to mention but a few. These sculptures are as shown in the figures below.

*Fig 4. The virwing point No.1 at Westhampsted Park (Kenwood House)  
Photograph by the Author.*





These three distinguished modern sculptures in the pictures, on the left-hand side of the page, have been designed by Barbara Hepworth (1903-75), Henry Moore (1898-1986), and Eugène Dodeigne (b.1923). Hepworth and Moore both lived in Hampstead in the 1930s, so it is likely that they would have known Kenwood's collection and estate. (Laura Houliston and Susan Jenkins, 2014)

The Monolith Empyrean is inhabited in the flower garden among two beds of rhododendrons, near a magnificent handkerchief tree. This figure has an oval head, which evokes the shape of a human. This sculpture was designed by Barbara Hepworth in 1953 who was a leading British sculptor. London County Council commissioned her to design this limestone sculpture; moreover, Monolith Empyrean once stood on the South Bank London.



Two-Piece Reclining Figure, No. 7 figure by Henry Moore is a Double-life-sized bronze sculpture, which is positioned in the landscape. Henry Moore liked to locate his sculpture in public places, to be freely available for everyone to enjoy. This sculpture is analogous to a recumbent figure, with the round upright representing the head and body, and the rest forming the legs. The sculpture is on loan from the Tate Gallery and has been displayed on the west pasture ground since 1982. (L Houliston and S Jenkins, 2014)

*Fig 5.*  
*Monolith-Empyrean by Barbara Hepworth, 1953 in the flower garden.*  
*Photograph by the Author.*

*Fig 6.*  
*Flamme by Eugène Dodeigne, 1983, next to a path below the dairy.*  
*Photograph by the Author.*





Flamme sculpture is a carved sculpture, a rare example of artwork designed by a Belgian-born, French sculptor Edgène Dodeigne. Its rough-hewn form, made of grey granite, looks like a figure, with head and arms. This sculpture has been on display in public in Britain since 1983, which can be seen by the path below the dairy.

### History of Kenwood

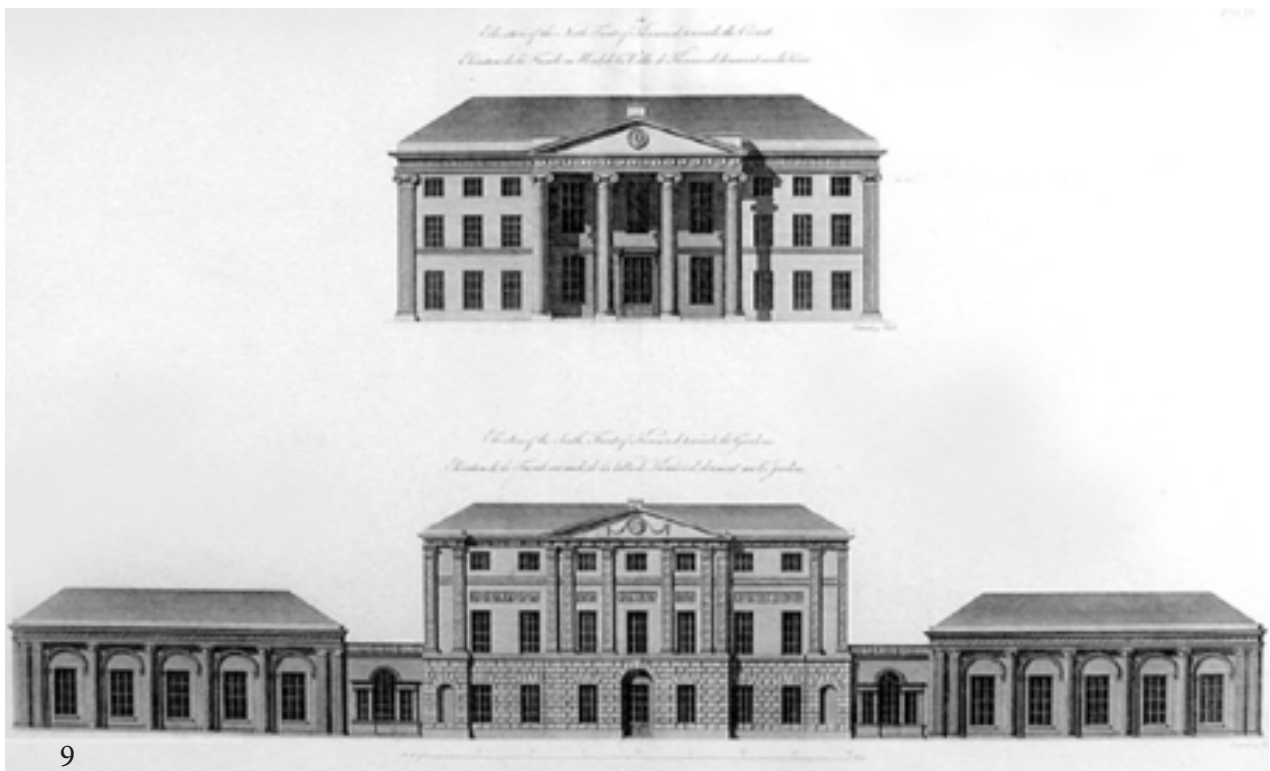
---

Kenwood House also known as Iveagh Bequest is a popular tourist destination in north London courtesy of its architectural composition and housing. The ground as well as the property is under management of the London County Council (English Heritage) since 20th century and remains open to the public from the late 1920s (“Survey of London: Volume 17, the Parish of St Pancras Part 1: The Village of Highgate”, 2019). There exists a general presumption that the Kenwood House was built by King’s Printer, John Bill around 1616 during which it was known as Caen Wood House. In 1964, Caen Wood House was on receivership to a new owner the surveyor- Sir General of the Ordinance,

William Bridges (S., et al., 2016). William Bridges upon acquiring the house is reported to have demolished the house then rebuilt it. The original structure of the bricks stands unaffected beneath the façade added in the 18th century (“Plate 98: Ken Wood, plan of the house”, 2018). Bridges added the orangery, a room which was dedicated for storage orange and other fruit trees during winter between the 17th and 19th century. Presently, orangery have been substituted with greenhouses or conservatories (“Kenwood House on Hampstead Heath, history and maps”, 2018). In 1704, William Bridges sold the house and proceeded among several undocumented owners until in 1754 when the property was bought by the then the future Earl of Mansfield, William Murray (Overall, 2012).

*Fig 7.*  
*Two Piece Reclining Figure, No. 5, 1963–1964 by Henry Moore, 1963–4, in the west meadow, on loan from the Tate Gallery, London.*  
*Photograph by the Author.*

Ten years after acquiring the house, William Murray appointed Robert Adam to remodel the house with full autonomy on the design of the house (“Kenwood House, corrected plan with later additions. | UK ~ Earls | Pinterest | Kenwood house, House and Architecture plan”, 2018). During this time, Adam is noted to have added the now famous library in the interiors to balance the orangery as shown in figure 8. The library was also to accommodate the vast collection of books owned by Lord Mansfield (“Kenwood House, Hampstead | CLASSIC in 2019 | Pinterest | Kenwood house, House and English manor houses”, 2019). Robert Adam also came up with the design of the ionic portico positioned at the entrance. In 1980, the house became a permanent residential place (“Kenwood house, London”, 2018). The South and North elevations of the Kenwood house by James Adam and Robert (“Plate 99: Ken Wood, the entrance front”, 2018) as shown in figure 9.







10

North front of the house has a sanded paint refurbished appearance which presents the sandstone, reflecting façade of the 1970s. Main entrance of the Kenwood is located by the north façade which was designed and added to the building by Robert Adam.

In the 1760s, Robert Adam added a beautiful Ionic portico which gives a Neoclassical character to the building. The four Ionic Greek columns with a triangular pediment on top are some of the Neoclassical aspects of this building which could make you question the similarities between the two styles

There are two white Suffolk brick buildings between the entrance, which was added to the villa by Humphry Repton who was hired by 2nd Earl of Mansfield; they never toned them to match these two wings to the main body of the building. Moreover, between the years 1768 to 1769, Joseph Rose added the plasterwork, including the 'Doric cornice in hard stucco' to the building. The north façade has been recently refurbished to have the same look of the 1970s as it was during the 2nd Earl period.

*Fig 8. The Library  
Photographs by Author*

*Fig 9. The North and South elevations of Kenwood house  
(<https://www.donaldheald.com/pages/books/5327/after-robert-adam-james-d-1794/elevation-of-the-north-front-of-kenwood-towards-the-court-elevation-of-the-south-front-of-kenwood-towards-the-courtyard>)*

*Fig 10. The North Facade  
Photographs by Author*



At the beginning of, the 18th century Georgian architecture was the most reputed architecture style in England. Georgian architecture is a simple, rational style with purest form of architecture and the best reflection of ancient architecture since antiquity. In Georgian architecture, all the structure of the building is based on symmetry.

The main entrance of the Kenwood house is on the north front of the building, where the portico is located. Robert Adam added this portico to the original brick house in the 1760s, and it raises to the full height of the early 18th-century two-story house which covers the initial brick building shown in figure 11.

As it has been mentioned earlier, Kenwood House is a Georgian building. However, some small details on this building separate Kenwood from the rest of the buildings with a Georgian style. The Serlian windows on both sides of the building are just an example which are the key elements of Palladian architecture. These windows consist of a large window divided into three with the central arched window, being the largest. This style was primarily illustrated by Sebastiano Serlio in 1537. however, it drives from earlier Roman sources, such as the triumphal arch. (D Jones, 2014)



*Fig 11. Ionic portico designed by Robert Adam, at the entrance to Kenwood House in Hampstead, London dates from the 18th Century  
Photograph by Author.*



*Fig 12.. Serlian window on both extension wings on the north facade  
Photograph by Author.*



### North Front

The north front has a wonderful stone frontage look, with its phenomenal portico and its four Ionic columns. This façade is an excellent example of a Georgian building. Although, the middle part of the façade distinct than the extensions on either side of the building (the wings) the entire building is a brick building. Besides, the central section is coated by a cement wall.

The four columns in front of the main entrance, under the portico, are mainly made of brick and wood beams were used every few feet, in order to keep the layers of brick on target. To provide sustainability, the columns were covered with a layer of cast.

Up until around 1719 Kenwood House was still a two-storey weekend and summer villa. After the main building was finished, 25 years later, two yellowish, cream brick wings were added to either side of the original villa. These two extension wings have six windows on their inner wall; the three windows of the upper floor are slightly smaller than the windows of the ground floor halls. Moreover, not all of the windows on the wings are real; there is only one real window on the right-hand side wing. The windows are only there for decoration and giving an asymmetrical look to both sides of the building as Kenwood House has a Neoclassical architecture.



*Fig 13. Left Wing Extension, the Inner wall  
Photograph by Author*

*Fig 14. Right Wing Extension, the Inner wall  
Photograph by Author*





South Front

Adam was definitely satisfied with the extraordinary south front and terrace at Kenwood. As he published illustrations and features of its design in 1774 in his book “The Works In Architecture of Robert and James Adam”. Known as the orangery; all these parts of the house needed to be symmetrical. Adam explained that ‘the details of the south facade, except that of the west wing, is completely new, and became in some degree essential, to conceal the brick-work, which is built at other times, was of several colours – The Attic story is a late addition to the house.’ (L Houliston and S Jenkins, 2014) Joseph Rose designed the decoration of the façade. The south frontage was finished with an oil cement identified as ‘Liardet’s composition’, by 1778. Adam’s brother acquired the patent; however, it was unstable and deteriorated rapidly. (L Houliston and S Jenkins, 2014)



Fig 15.  
South Front (Lake Facade)  
Photograph by Author

Fig 16.  
South Front Detailed Photograph (Middle Section of the Building)  
Photograph by Author



## Entrance Hal



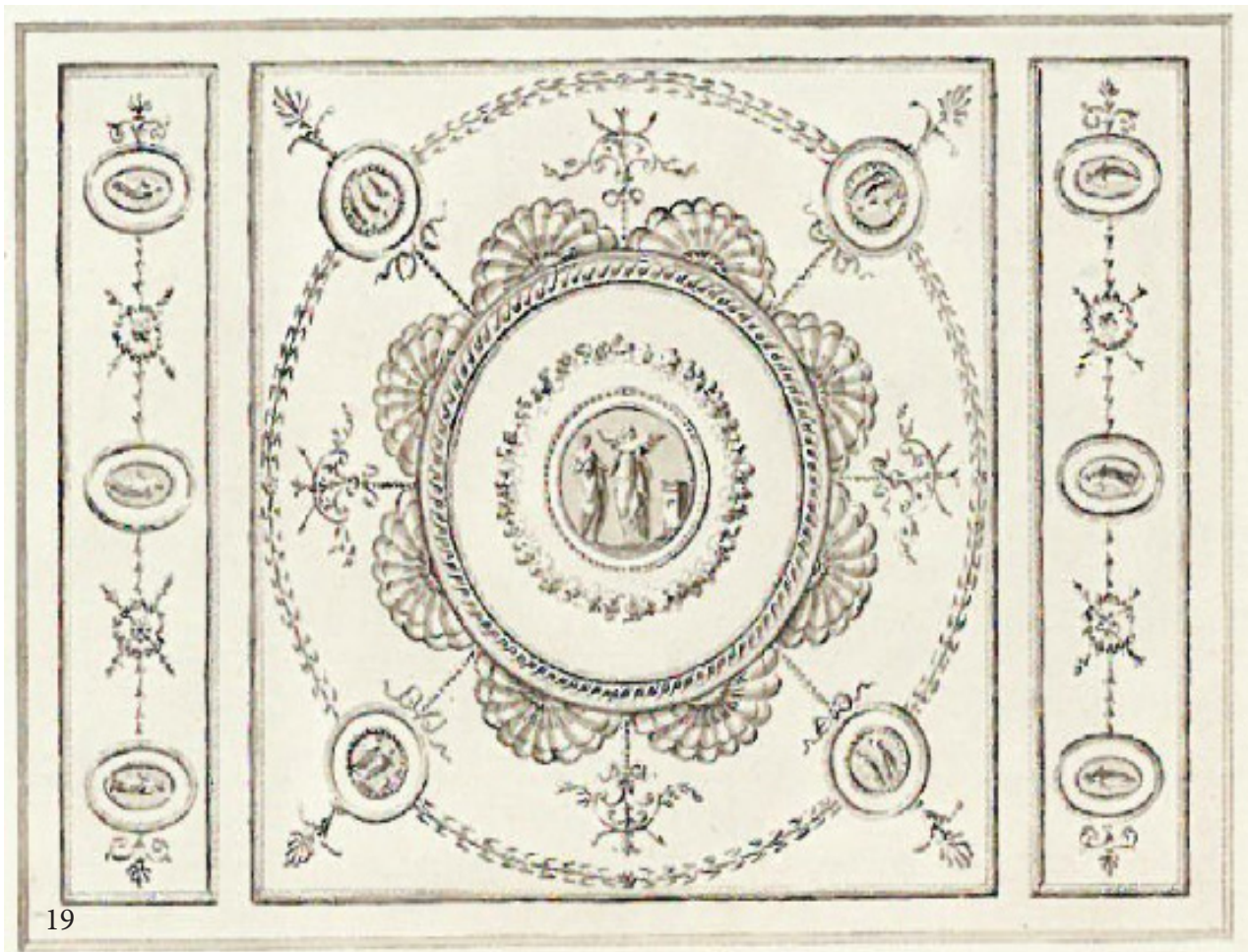
Lord Mansfield was an excellent and highly educated lawyer who quickly got into aristocratic circles. He was a close friend of ultra-grand Duchess of Portland and numerous bishops such as Thomas Newton, Alexander Pope, and David Garrick. Moreover, he was married to Lady Elizabeth Finch, who was the daughter of 2nd Earl of Nottingham. During the period of 1st Earl of Mansfield, he used the entrance hall area like a dining room for some occasions for his diplomatic friends.

The entrance hall is a modest room, showcasing an example of an earlier 18th-century house. There are three doors in the south wall initially, reaching to a room, a drawing room and a closet. However, the central door was blocked in 1815. It was the last in the sequence of rooms at Kenwood to be redesigned by Robert Adam between 1773 and 1774. There are some doubts that Adam and Lord Mansfield changed their minds during design process, as Adam's initial drawing for the ceiling did not include any reference to a dining room. However, the decoration which could be seen today at Kenwood is clearly demonstrating a dining room. (L Houlston and S Jenkins, 2014)

*Fig 18. Door handles of the entrance hall  
Photo by the Author*

*Fig 17. Entrance hall of the Kenwood House, which been used as a dinning rood for a period of time and at the moment it is known as the drawing room as well.  
<http://vipauk.org/enter/poi/lond/k03.html>*





19

Robert and James Adam doubled the size of the room by bringing door handles and all of the decorative features such as chair-rail of all the rooms lower. Moreover, the ceiling plasterworks created by Joseph Rose, and painted by George Steuart in two different shades of green, purple and ornaments white. Furthermore, the round circle in the middle of the ceiling was painted by Zucchi, which indicate Bacchus, god of wine and Ceres, goddess of agriculture characteristic subject for dining room and smaller ovals shape with a figure of Bacchantes. He has also made plasterwork of Diana resting after the hunt with nymphs and hounds, which could not be seen any longer (perhaps removed in 1815 and now lost).

A marble chimneypiece of the entrance hall was carved with grapes by George Burns. Moreover, the furniture of the room which includes, the side table and painted pedestals are from Adam's designs by Sefferin Neilson.



20

*Fig 19. The Initial Drawing of the ceiling by Robert Adam  
L. Houliston and S Jenkins, 2014*

*Fig 20. Door handles of the entrance hall  
Photo by the Author*



## The Great Staircase

The main Stairs were built between 1767-1769 and it was lit by a window on the first-floor landing in the beginning; decorated with a ceiling designed by Robert Adam in 1767. Following the development of the dining room in the east wing in 1796, the window on the landing was taken out and replaced by a skylight on the ceiling. The main opening of the staircase still the same and starts into the antechamber, except the two doors originally leading to a small parlour in the north wall and a backcourt and water closet in the east wall, which no longer lead to these rooms.



## Antechamber

Antechamber and the library were the only rooms on the ground floor which were added to the building by Adam brothers. This room served as a lobby to the library, with three recess for statues, and a Venetian window with a view over London. Antechamber's dimensions are symmetrical to those of the Housekeeper's Room to the west, giving Kenwood its magnificent, symmetrical south façade. An early design of the antechamber north wall proposed by James Adam in 1764, illustrates one of the statues set in a recess. It was a plaster sculpture of Flora (Ties: the goddess Thetis, a sea nymph) and a muse designed by James Hoskins and Samuel Oliver in Rome in 1771. However, present plaster sculptures in Kenwood House, are just replicates.

The Antechamber was decorated by the carver John Minshull and the plasterer Joseph Rose, who supplied a decorated plaster ceiling moulding designed by Robert Adam and described as an 'ornamented Fann with Festoons &c in Center of ceiling 9 feet in diameter'. The antechamber has been redecorated to reflect its original colour scheme, with pale green lead oil paint on the walls and white columns which had been painted red porphyry in 1815.

*Fig 21. Antechamber Room  
Photo by the Author*



## Library

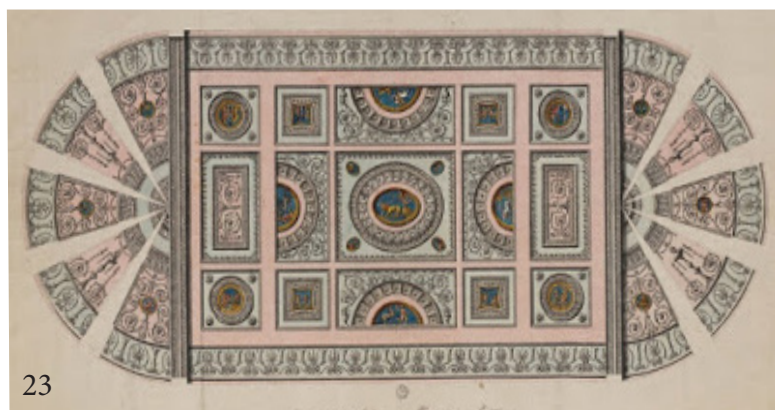


Fig 22. The Great Room/Library

<http://willowbrookpark.blogspot.com/2015/11/kenwood-house-part-1-of-3.html>

Fig 23. The Great Room/Library Ceiling

<http://willowbrookpark.blogspot.com/2015/11/kenwood-house-part-1-of-3.html>

Twelve designs for the library were signed by Robert and James Adam, between the years 1764-1767. (L Houliston and S Jenkins, 2014). James Adam was the first designer of the Great Room or the Library for Lord Mansfield, and he designed this room in 1764, while Robert Adam had provided the exterior elevation of the south front. However, the final design of the Library was by Robert Adam.

This room has a great apses and a vaulted ceiling on its ancient columns and wall carving designs. An exquisite great library was formed with the similarities in character of Syon's house dining room, with apsidal ends screened by a pair of Corinthian columns (designed by William Kent for Holkham Hall, Norfolk, whose designs were just published in 1761). The dining room in Syon House, Richmond, London. (J. Musson 2017)

To be able to get into the great room you would need to pass through an anteroom, which helps visitors to prepare to get into the highly decorated space that combined with the charms of the library and a drawing room. Moreover, the original furniture designed by Adam is still available in the Library, including the alternative sofas within the niches.

A beautiful view over London could be seen through the two tall windows located in front of the mirrors on the opposite wall. Furthermore, the alcoves which are located by the end of the room is filled with bookshelves.

With Adam's work and the picturesque landscape of the park, Kenwood became a perfect place for Lord Mansfield to entertain and amaze his political and legal colleagues as well as writers, and foreign diplomats. Besides, he was famous for his congenial company, something he profoundly took pleasure in.

As Lord and Lady Mansfield's did not have any children after the death of the Lord, Kenwood was passed to David Murry his nephew, who was the 2nd Earl and Countess of Mansfield by 1796. In addition, he decided to follow his uncle's work on the house and employed Humphry Repton in order to remodel the grounds. The next owner of the Kenwood was David William Murry, 3rd Earl of Mansfield's and it was within this period that the dairy was built.

Later on, in the early 20th century he let the house to the Grand Duke Michael Michaelovich of Russia by 1910. The 6th Earl of Mansfield sold the house to Edward Cecil Guinness who was the 1st Earl of Iveagh, he made Kenwood part of his painting collections. Today, this house is under the care of English Heritage, and it is open to the public.

In 1922, there were speculations that the Kenwood House would be bought by a building syndicate. This prompted Kenwood Preservation Council to buy significant part of the property before being handed to the London City Council in 1924. The opening of the grounds for public access was graced by King George V in 1928. Other parts of the estate, including the house and 74 acres of land was bought by Lord Iveagh. Upon his death in 1927, Lord Iveagh left his share for the benefit of the public.

During the first world war when the Grand Duke Michael lived at Kenwood House, The Royal Naval Anti-Aircraft Mobile Bridge was situated in the stable block of Kenwood; from November 1915 to August 1916. However, Kenwood House was shut toward the beginning of World War II. Following the war, the house went under responsibility for London Council, and it reopened in 1950. The late 18th century augmentations by Saunders were re-established from 1955-59. Ownership exchanged to the Greater London Council (GLC) in 1965; after the GLC's destruction in 1986, English Heritage took over obligation regarding the estate.

The house was shut for real redesigns from 2012 until late 2013, partly funded by the Heritage Lottery Fund. This included fixing the Westmorland slate rooftop, redisplaying the Iveagh Bequest artistic creations in the south of the house, and refurbishing the structure making it look like Adam's unique plan.

The domain has a planned scene with greenery enclosures close to the house, likely initially structured by Humphry Repton, appearing differently in relation to some encompassing forest, and the naturalistic Hampstead Heath toward the south. There is additionally another patio nursery by Arabella Lennox-Boyd ("Hampstead Heath - Hampstead Heath walks, ponds, woodlands and Kenwood House", 2016).

The domain is Grade II recorded on the Register of Historic Parks and Gardens. 33% of the home is a Site of Special Scientific Interest, especially the antiquated forests. These are home to numerous flying creatures and creepy crawlies and the biggest Pipistrelle bat perch in London ("Kenwood", 2019).

Music shows, initially traditional yet in later years overwhelmingly pop shows, were held by the lake on Saturday night times each late spring from 1951 until 2006, drawing in a great many individuals to excursion and appreciate the music, view and dynamite firecrackers (Jobs, 2018). In February 2007, English Heritage chose to surrender these shows attributable to limitations set on them after dissents from some nearby occupants. On 19 March 2008, it was declared that the shows would come back to another area on the Pasture Ground inside the Kenwood Estate, with the quantity of shows constrained to eight for every season ("Kenwood House - Official", 2019).

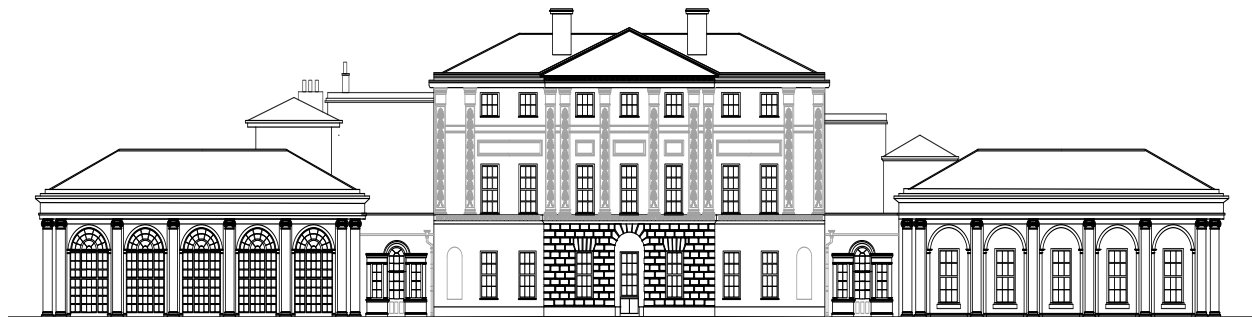


# Chapter Two

---



*Fig 24. 1.200 North Elevation (Main Entrance of the Kenwood House)*  
*Drawn by Author*



*Fig 25. 1.200 South Elevation (Lake Facade)*  
*Drawn by Author*



This chapter explores my visit to Kenwood House. I decided to write about this mysterious villa; as I always been fascinated by the way, this building has been finished impeccably. As I have visited this building several times before, choosing it for my dissertation, I was quite familiar with its site. However, I would still like to learn and know more about this hidden on the edge of Hampstead Heath.

There are two massive 17th century gates with a small white-brick lodge between them. After the gates, there is a long path surrounded by loads of tall trees. These tall trees gave a unique look to this path leading to the house, as they form a tunnel like shape, making it very a pleasant welcome. Walking into this phenomenal natural tunnel, you will be faced with another small gate which is older than the first ones. As you get to the end of the path, you will be welcomed by a Georgian facade building with centre Ionic portico in front of the main entrance; which is inspired by the entrances of the old temples. Besides, the wonderful portico and the pediment on top of it with its four columns bring a Neoclassical look to the building.

Instead of getting into the building directly, I decided to learn more about the exterior of the building, park and its surroundings and how the combination of fantastic decorations, statues and unique selection of trees, help in making this a beautiful place for people of all ages to come and enjoy. I walked into a small tree tunnel, which is next to the right-wing. This path goes to the other side of the building, the rest of the park and all the ponds.

The opposite side of the building has a white facade with loads of beautiful decorative plasters all over the building. From a distance, it looks like a stone building, despite the fact that it is a brick building covered by plaster.



*Fig 26. South Facade, Plaster Decoration*  
*photograph by Author*





As the other side of the building has everything in symmetry, this side is the same. When Robert Adam added the two wings of the building, he put five windows on either side of the building. Similar to the other side of the extensions, not all the windows are real windows. When you look at the windows of the right-wing, where the library is located, you would see five windows from outside of the room. However, only three of these windows are real windows, and the other two are just for decoration, making both sides symmetrical

The extension on the left side was initially designed as an orangery room, where the family could use during the cold weather. Robert Adam created this room as the Mansfield family wanted to have a place where they could go and walk between the plants and trees in the winter and enjoy some fresh air.

Lord Mansfield decided to make some changes to the building and the roads around Kenwood House, after a few years. During the 1790s, Mansfield family had the power over the lands to the north. Accordingly, they rerouted the public road a bit further back since it was irritating when the local people were coming to the front of the house and stared at it.



*Fig 27. South Facade, Library Windows  
(Comparing the real and the decorative windows of this room.)  
photograph by Author*

*Fig 28. The Orangery  
photograph by Author*





Lord Mansfield decided to make some changes to the building and the roads around Kenwood House, after a few years. During the 1790s, Mansfield family had the power over the lands to the north. Accordingly, they rerouted the public road a bit further back since it was irritating when the local people were coming to the front of the house and stared at it. The public road was exactly by the main door of the house until the 1790s; where the grass is today. Figure 29

At the same time, while Robert Adam started the two extensions on either side of the house, Lord Mansfield asked him to construct the gates. The gates which we can see by the public road. Besides, the Mansfield family also wanted to show their power by extending their lands to the north.

After studying about the surrounding of Kenwood House, I decided to go back to the main entrance and explore the interior of the building too.

During the 18th century, most house/villas had a large reception, and their reception was a place where the guests would first arrive. Guests would wait in the reception area until they were served and then go to the other rooms.

In today's Kenwood House, whatever we can observe goes back to 1770s era. All the walls and paintings are precisely the same as then except for the doors and the flooring.

The remarkable elements about Kenwood House is the way you are able to recognise the original intention of Robert Adam, even after the passage of years, he first designed this house; even after all the changes this house has gone through. Additionally, Kenwood House is not a private weekend villa any longer and is now used as some kind of painting gallery and wedding venue.

*Fig 29. North Facade, Main Entrance*  
<https://www.english-heritage.org.uk/visit/venue-hire/corporate-event-hire/corporate-venue-finder/corporate-hire-kenwood-house/event-spaces-kenwood-house/>

After my visit to Kenwood house, two different main types of column stood out to me; Allocate in various rooms in the house, and these columns are Ionic columns and Corinthian columns. However, in general, the three main Greek columns are Doric column, Ionic column, and Corinthian column.

In Kenwood House, Robert Adam chose two different styles of Greek columns. Most of the columns which could be seen in Kenwood House are Ionic, some of these can be seen in the green room between the orangery and the music room. The other Ionic columns are located in the Antechamber room outside the library. The entrance of the building is welcomed with four huge ionic columns giving off a great deal of importance as you walk in. An exception for the columns in the library has been made in “the great room”, which are Corinthian. Endless efforts were carried out to make this room extra special.

Doric: Heavy simplicity

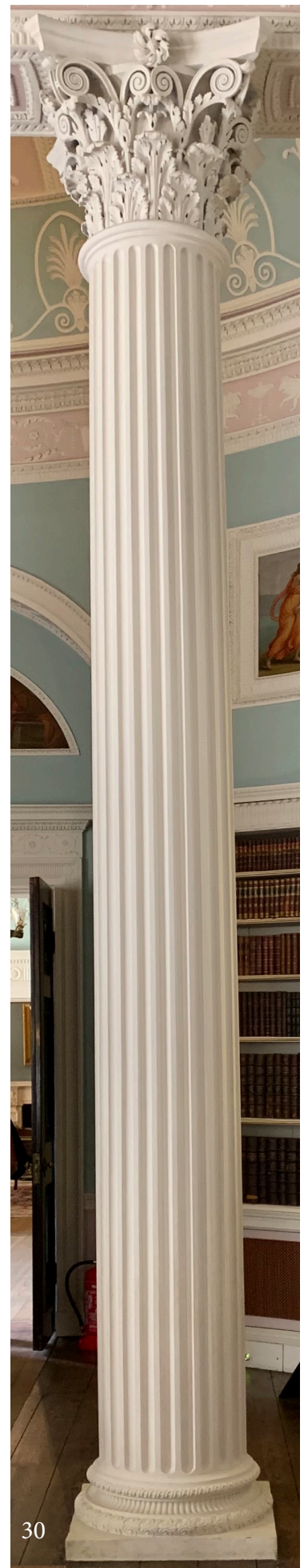
The first and oldest style of Greek columns, are Doric. Their shafts are sculpted with concave curves called flutes which are very simple. Doric columns are placed close together, without any base. Two-part of these columns (The capital) is plain with a rounded section at the bottom, known as the echinus, and a square at the top called the abacus. The vertical channels or triglyphs have a unique ornamental frieze. Doric Columns were first designed and seen being used, around 7th century B.C

Ionic column:

Ionic columns are very similar. They came in the 6th century B.C., after the Doric columns. These columns are being called Ionic, as it has first been developed in the Ionian Islands. Vitruvius, a Roman historian architect, compared Ionic and Doric columns as female and male; Ionic columns are very delicate to compare to the stockier “male” Doric order. Ionic columns were used in smaller buildings or the interior of the buildings. As it could be seen in Kenwood House, these Ionic columns have been used by the main entrance of the building. The two scrolls on its capital, are the main features of this style which easily could be recognized; they called volutes. Moreover, the oval shape between the volutes is known as the egg and dart. In a comparison of Ionic to Doric columns, the entablature located above the capital is narrower, and it has frieze containing a continuous band of sculpture.

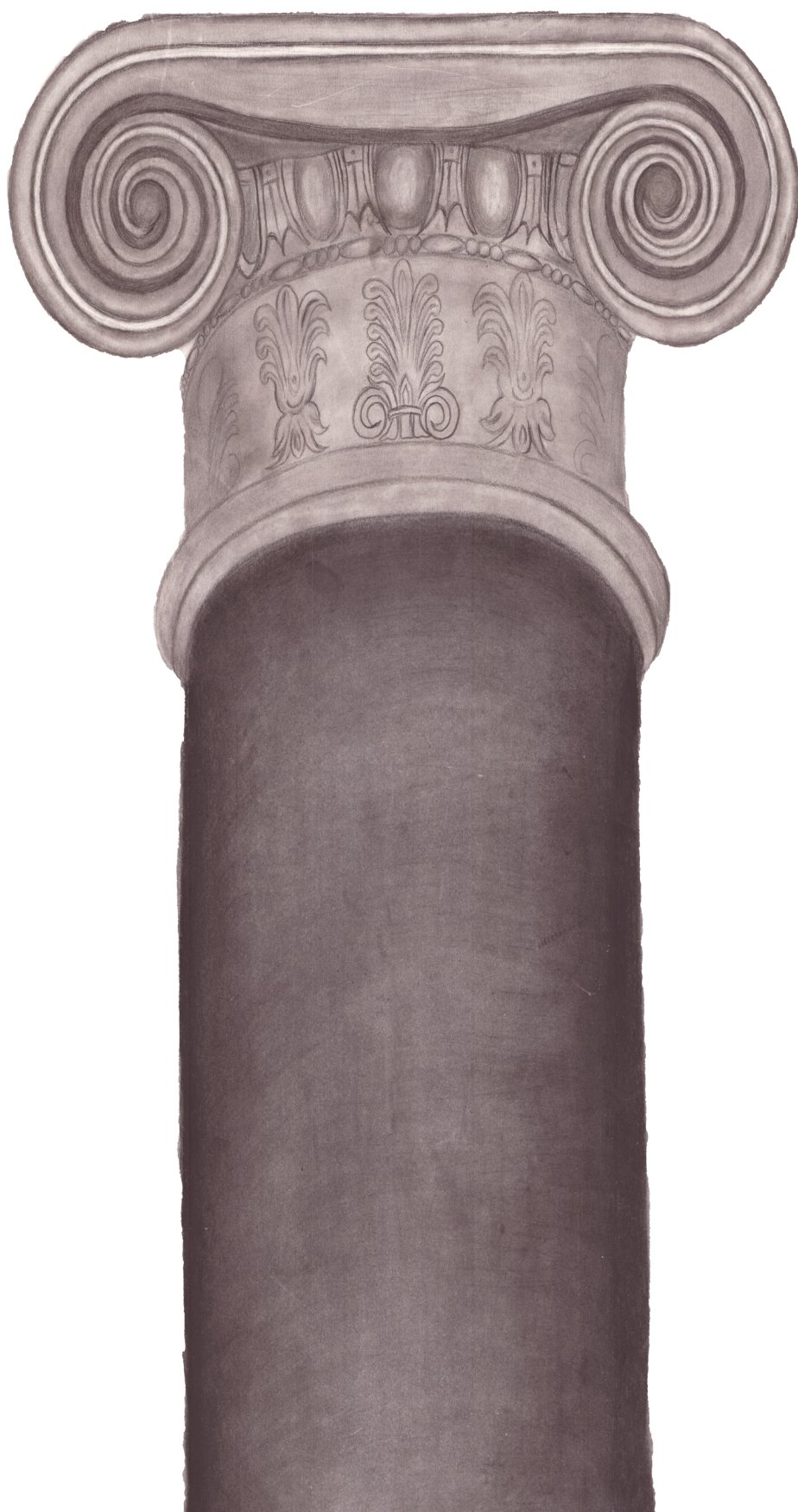
Corinthian: Leafy but not as popular

Corinthian, invented by the end of the 5th century B.C. in the city of Corinth by sculptor Callimachus, and it has been named after that. However, Corinthian columns were not that popular in Greeks. In these columns, there is a goblet surrounded by leaves. Besides, base and entablature of these columns are very similar to the base of Ionic columns. However, Corinthian capital is far more ornate, carved with two tiers of curly acanthus leaves.



*Fig 30. Corinthian column in Library  
photograph by Author*





31

*Fig 31. 1.20 pencil drawing of one of the ionic columns in Green rm, by Author*

The great room which we now call it (the library) is one of the great Neoclassical rooms of Britain and could be argued as one of the greatest rooms in regard to its beautiful design, which is almost finished perfectly. The design of this room is based on a Roman building, Adam visited himself in Italy. Besides the Antonio Zucchi did the painting of this room as well as the painting on the ceiling in the reception area.

Kenwood House has quite a big reception area as Mansfield family used reception room as their dining room before adding the two extensions where formal dinner would usually take place, which was quite uncommon

Although the entrance hall is not being used as a dining room any longer; nor any other parts of Kenwood house, this house is not a villa any longer. Nevertheless, the painting on the ceiling are still giving you the impression of a dining area and how this room was initially designed. Since they have used this room as their dining room, Antonio Zucchi added significant paintings on the ceiling of this room as well as the library. Faber Birren has pointed out that one important use of colour in the visual arts of the past, including architecture, was symbolic: the use of specific colour to represent abstract ideas. (Faulkner, May 1952)

Further study of the picture on the ceiling gives the impression of a dining room. Most of the paintings are themed around eating and drinking. With examples about god and goddess from ancient architecture.

In one of the pictures, you would be able to see Dionysus, who was the goddess of wine and Demeter, who was the goddess of harvest. Besides, the wine Leaves with grapes could be seen in some of the paintings. The interesting fact about this room is, everything in this room is more about eating and drinking.

As mentioned earlier, almost every part of the house today is how it used to be when the Mansfield family lived in Kenwood. Also, the original colour scheme today is how it was back in the days. Approximately six years ago (around 2013), English Heritage closed the house and refurbished it, bringing all the colours from that era back into life.

The bright pink and green colour seen today on the ceiling of the reception room and library are the same colours from that era but with a slightly brighter tune. Usually, the interior of the houses was quite dark and dusty back in the 16th/17th century. During that period, people were lighting their homes with oil and candle, and heating their houses with loads of little charcoal. Consequently, the houses were quite dark, the colour which we can see today on the ceiling and the walls is not exactly the same. All of the low-quality lighting and heating systems would take away the bright colour of the paint, after a short time of painting.

Most of the times, the guests were mainly, lawyers, politicians, legal advisers, or other prominent people. They would usually come to William Murray to borrow money since William Murray was one of two top richest men at the time. William Murry also became Lord Chief Justice in 1754.

There are six doors all around the reception room (Mansfield's family dining room). However, not all the doors are real, as mentioned earlier. Two doors located on the long wall, are only for decoration but the rest of the entries on both sides of the room are real, and they lead to a room or corridor. One of the doors on the top left side of the room leads to the main staircase of the house and library. The other door at the other side of the room, opens to the second staircase and the right-wing where the music room and plant room are located. The other two doors lead to the kitchen and areas where the servant used to live.

The library was part of Adam's extension, which took four years to complete, between the years 1774 to 1769. William Murray usually took his guests to this room after dinner to discuss political topics.



After the corridor, where the main staircase of the house is, there is a lobby to the library. This room has been designed for a purpose, and that purpose was the view. Robert Adam designed the lobby for the astonishing view of the pond and much of the city of London. Although, most of the times thick fog and smoke generated from cooking and heating with low-grade fuel. Even in the middle of the summer, there would have been quite a severe amount of smoke above London which could have been seen from the room, back in the old days. The picture that can be seen today out the window is only the view to the pond. However, when William Murray and his family lived in the house, the trees were smaller so central London could be seen from that room. It was a very pleasant feeling and the views of endless fields leading into London, would make this an especial waiting area. However, nowadays should you wish to view the centre of London, a small walk through the beautiful park will lead you to Kenwood Viewpoint which is now known as Parliament Hill (Kite Hill). This view, over London could also be appreciated from the library.



*Fig 32. Parliament Hill (Kite Hill) view point  
photograph by Author*



*Fig 33. Pink and green paintings which been used in library and entrance hall  
photograph by Author*

The library used to be called “the great room”, it was never designed to be an actual library. The main purpose turned out to be a room for Lord’s Mansfield visitors, a men’s room for them to talk about various issues, such as politics, legal matters, and business.

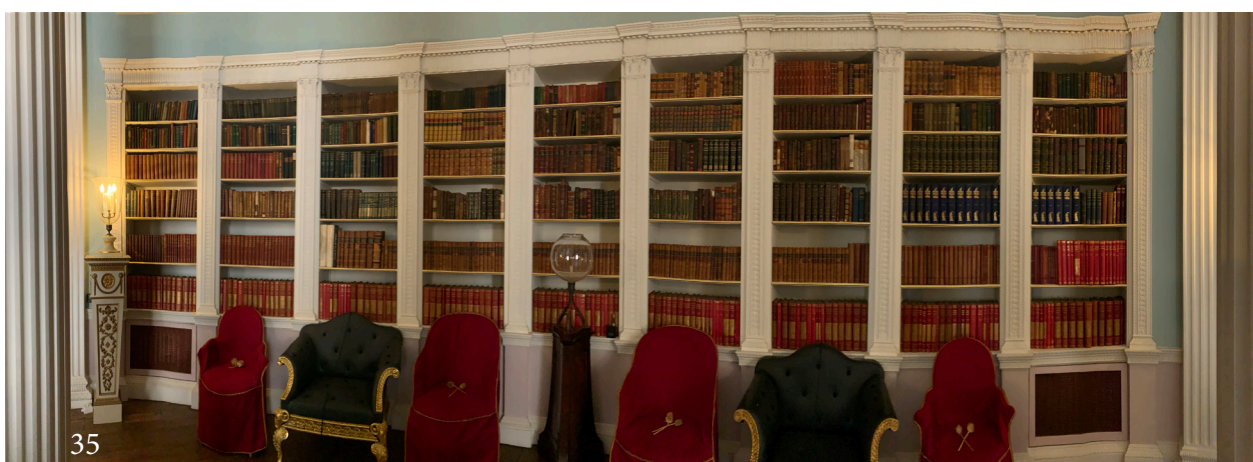
The furniture and style of the rooms were quite different from what we see today. On early 20th century, Mansfield descendant, (owners of the house) put this house on auction. As a result, most of the furniture were sold on at the auction. The furniture we see today is not all of the original furniture, though the pieces in Kenwood are pleasantly distributed. However, the style of this furniture is not the same ones which was been used by William Murray and his wife, Elizabeth Finch.



The library was one of the great Neoclassical rooms of in Britain, and it can be argued it is a great room in this house. Robert Adam designed the library, based on the Roman building he has seen in Split, in Croatia.

As it has been mentioned earlier, the painting on the ceiling of this room has been done by Antonio Zucchi too. All the painting of the ceiling has been finished on paper and stick to the ceiling; they were not painted on plasters.

The flooring of this room is still original flooring which was designed by Robert Adam. What is extremely interesting is the way Adam went into so much details. The wooden panels have been cut and put next to each other very precisely. While the panels are getting closer to the centre of the room, their size gets wider and wider. The reason why Adam designed the flooring of the rooms this way was to make the rooms look bigger. He also added some other tricks to the rooms, to make them look bigger and taller. He brought all the chair rail around the room a few inches lower and put all of the door handles a bit lower to achieve this effect.



*Fig 34. The original French mirrors, which is still available in Kenwood House  
photograph by Author*

*Fig 35. Book shelves, in library  
photograph by Author*



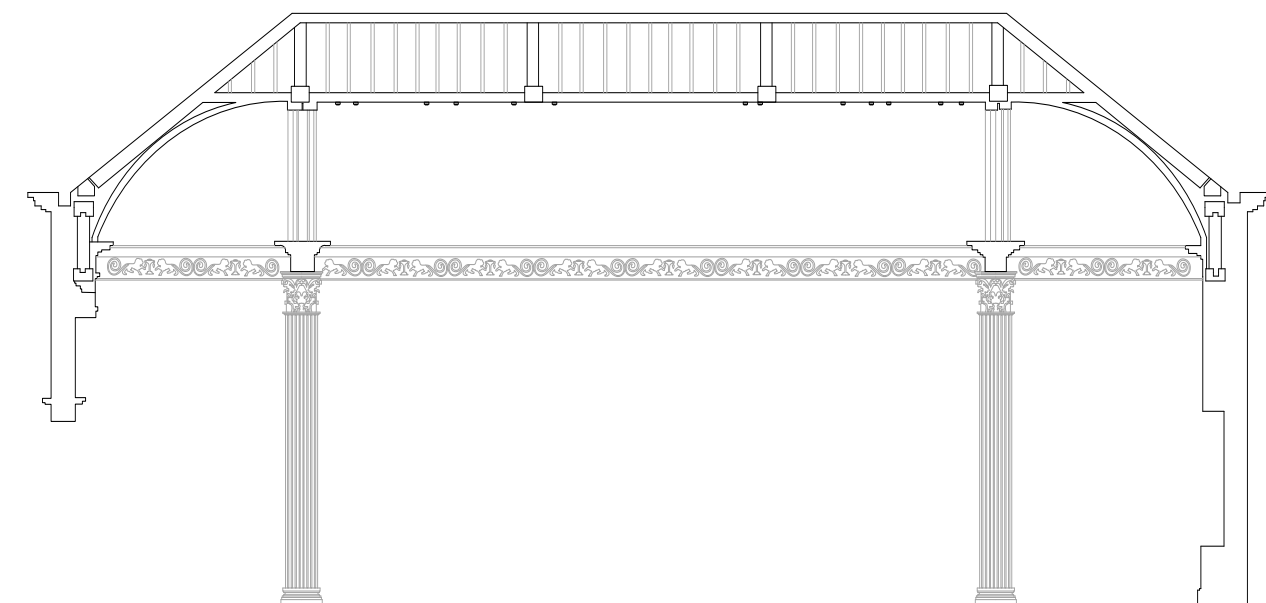


Fig 36. 1.200 The Library Section 1  
Drawn by Author

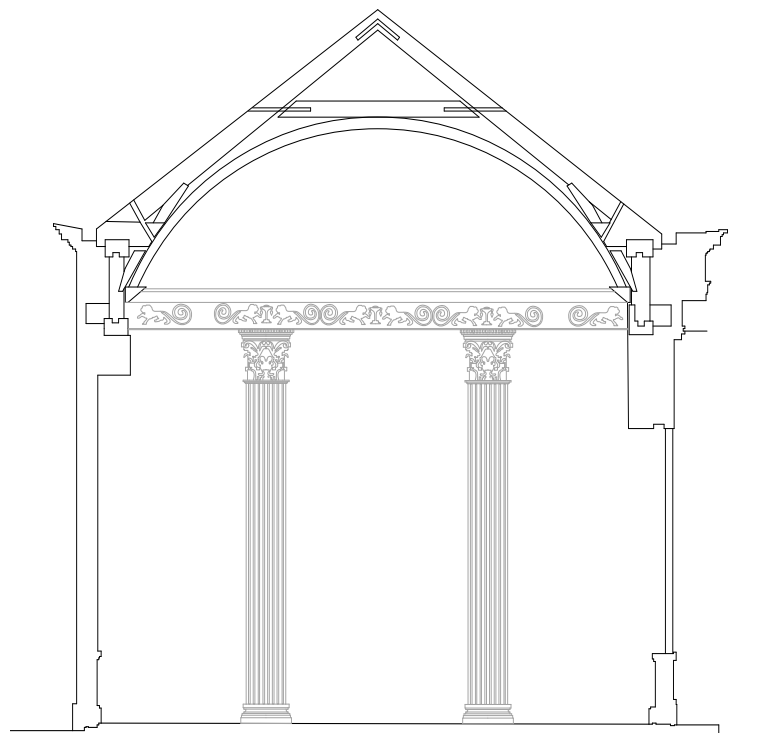
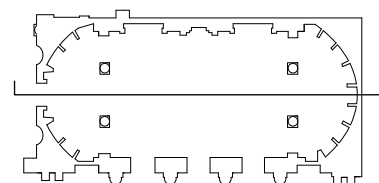
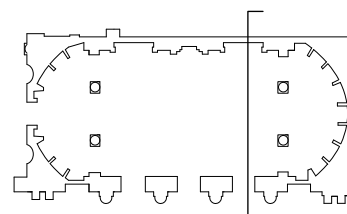
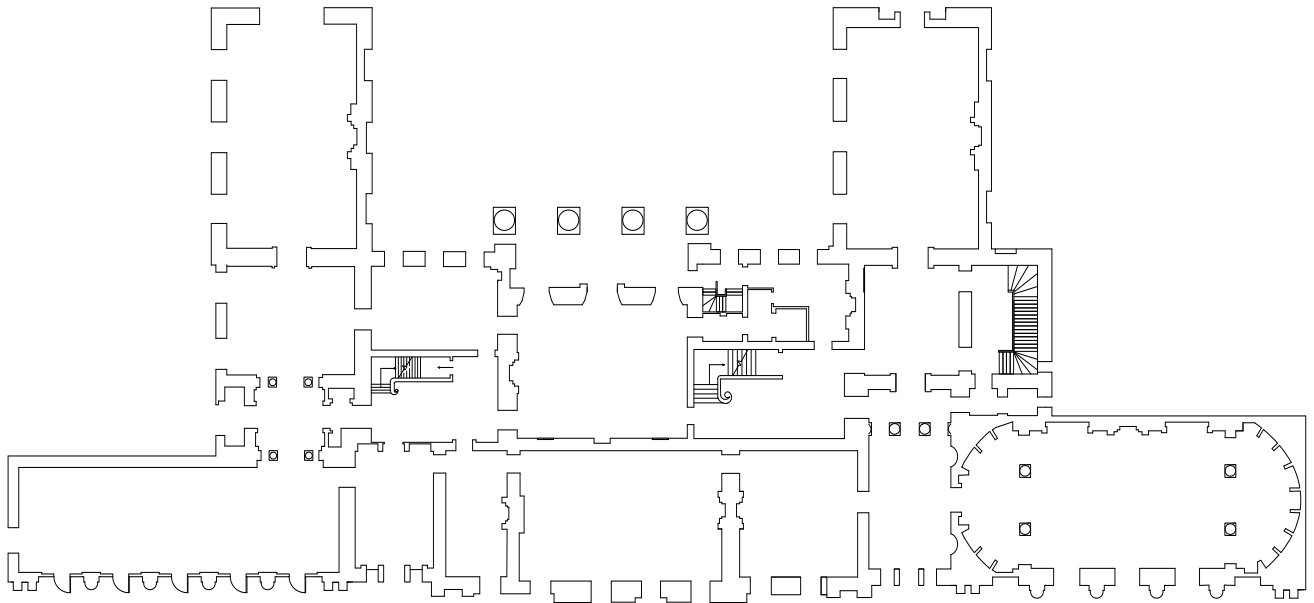
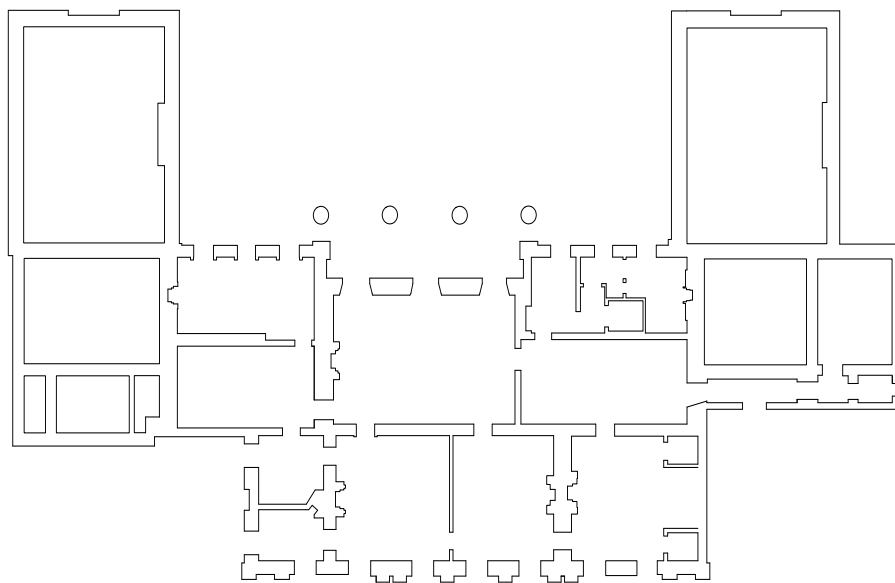


Fig 37. 1.200 The Library Section 2  
Drawn by Author





*Fig 38. 1.200 Ground Floor Plan*  
*Drawn by Author*



*Fig 39. 1.200 First Floor Plan*  
*Drawn by Author*

0m 1m 5m 10m 20m





# Conclusion

---

## Conclusion

---

As it has been mentioned earlier Kenwood house has been built over several decades. Although the building appeared very coherent it has been accumulated and changed over time. The story of alterations makes this building quite unique in regard to its structure and landscape. One interesting aspect of it, is the mixture of Palladian and Georgian styles of architecture which makes it more intriguing.

In conclusion, all of these different styles in architecture which exist all around the world came from different time periods. They have been affected by various factors such as technology, cultures, religion, lifestyle, and many more.

Obviously, different levels of technology and new inventions have improved over the years. A combination of art and new scientific findings, gradually improved architectural level. Changes influenced on both structure and features of buildings. As a result, buildings are made with a stronger foundation and structure. Besides, we are now able to create the beauties which we were never able to create back in the day.

Kenwood House is not the only building that has been completed over a long period of time. One of the best and most famous examples of this style of architecture is La Sagrada Familia in Barcelona, Spain. This could be named, as well as, Port Authority in Antwerp, Belgium, Museum of Military History in Dresden, Germany, Space Asia Hub in Singapore, and many more.

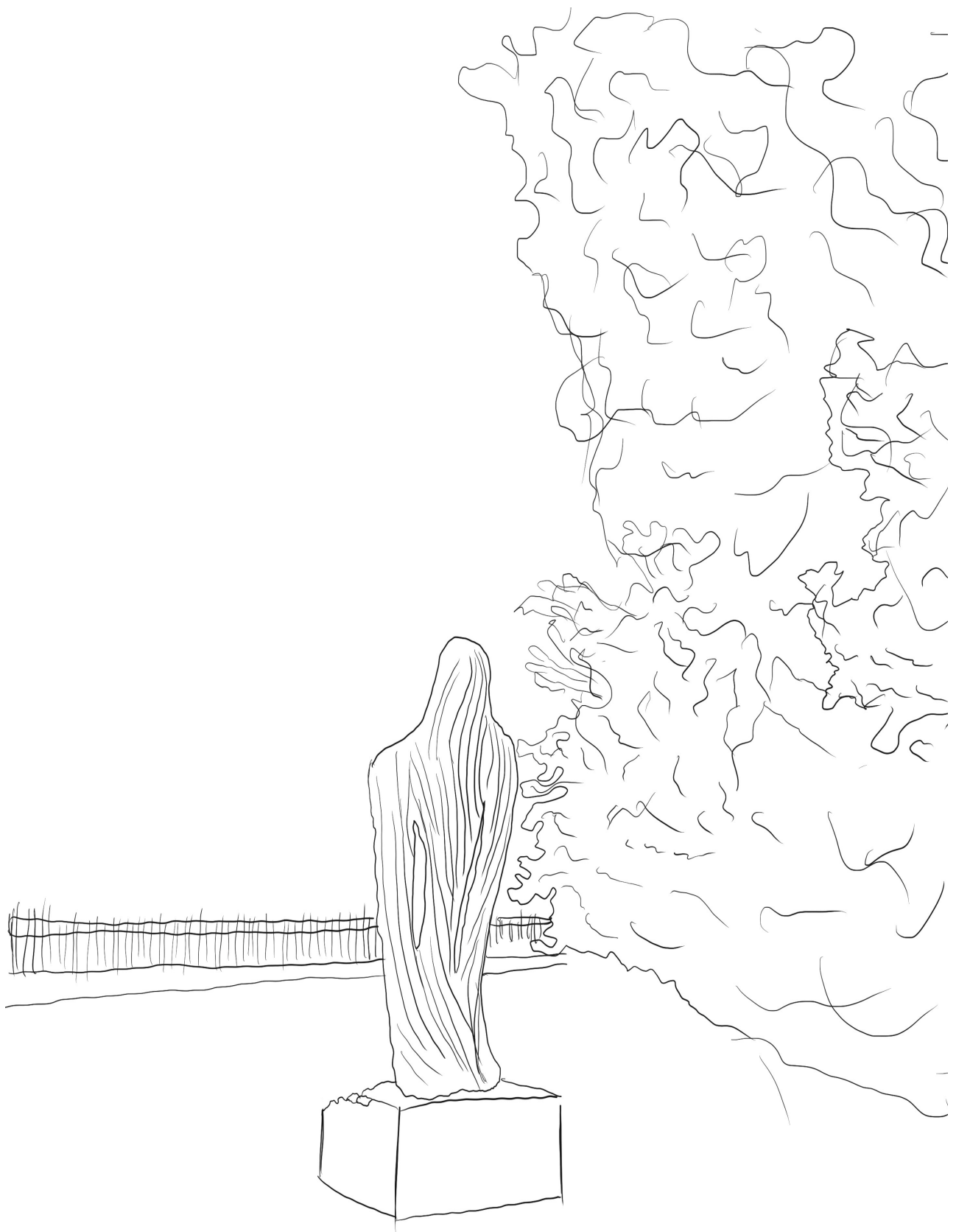
Statistics show that the architecture style which is becoming very popular is a combination of a classical architecture and Modern/Neo-Futurism. This style seems to be increasing in popularity. It is becoming very popular these days, not only for its unique beauty, but also this style offers an abundance of benefits for the company and the environment. The very first and most important benefit of this style of architecture is on the environment, due to the recycling and fewer materials required for completion of the building.

After my research and personal experience at Kenwood House, has the objective of different styles of architecture been identified. "Is it the architecture style that is affected by time or is it the style of architecture which develops through it?" This is still a question, as they are both correct. In conclusion, the question is still unsolved and, the pursuit for answers will continue. Fortunately, these will be seen through the development of buildings for years to come.



# Appendix

---

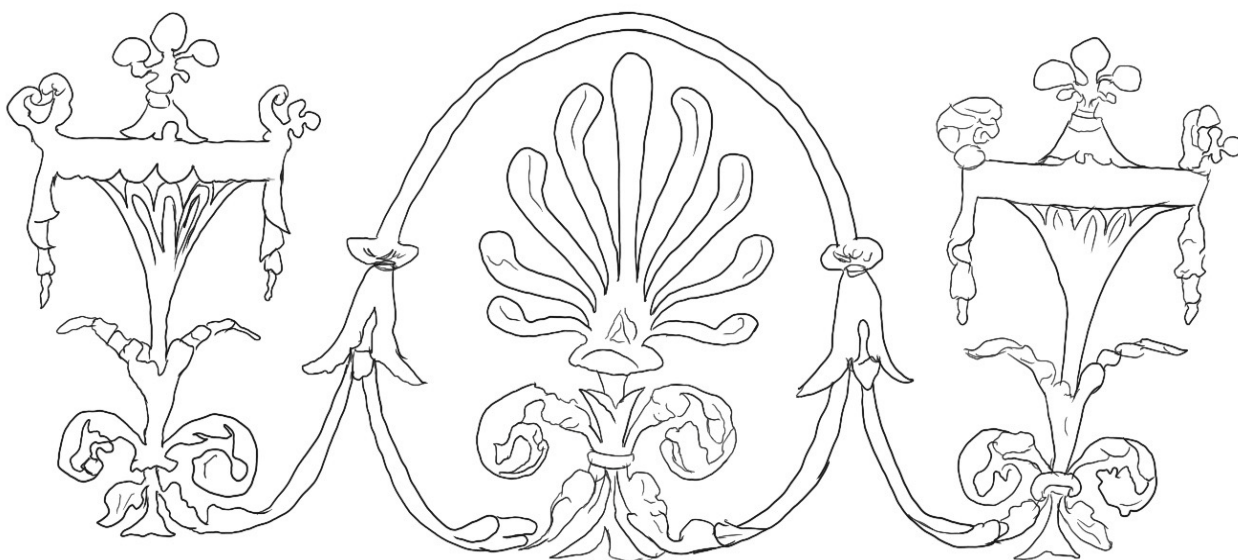


*Fig 40. One of Later Sculptures Around the Site  
Draw by author*



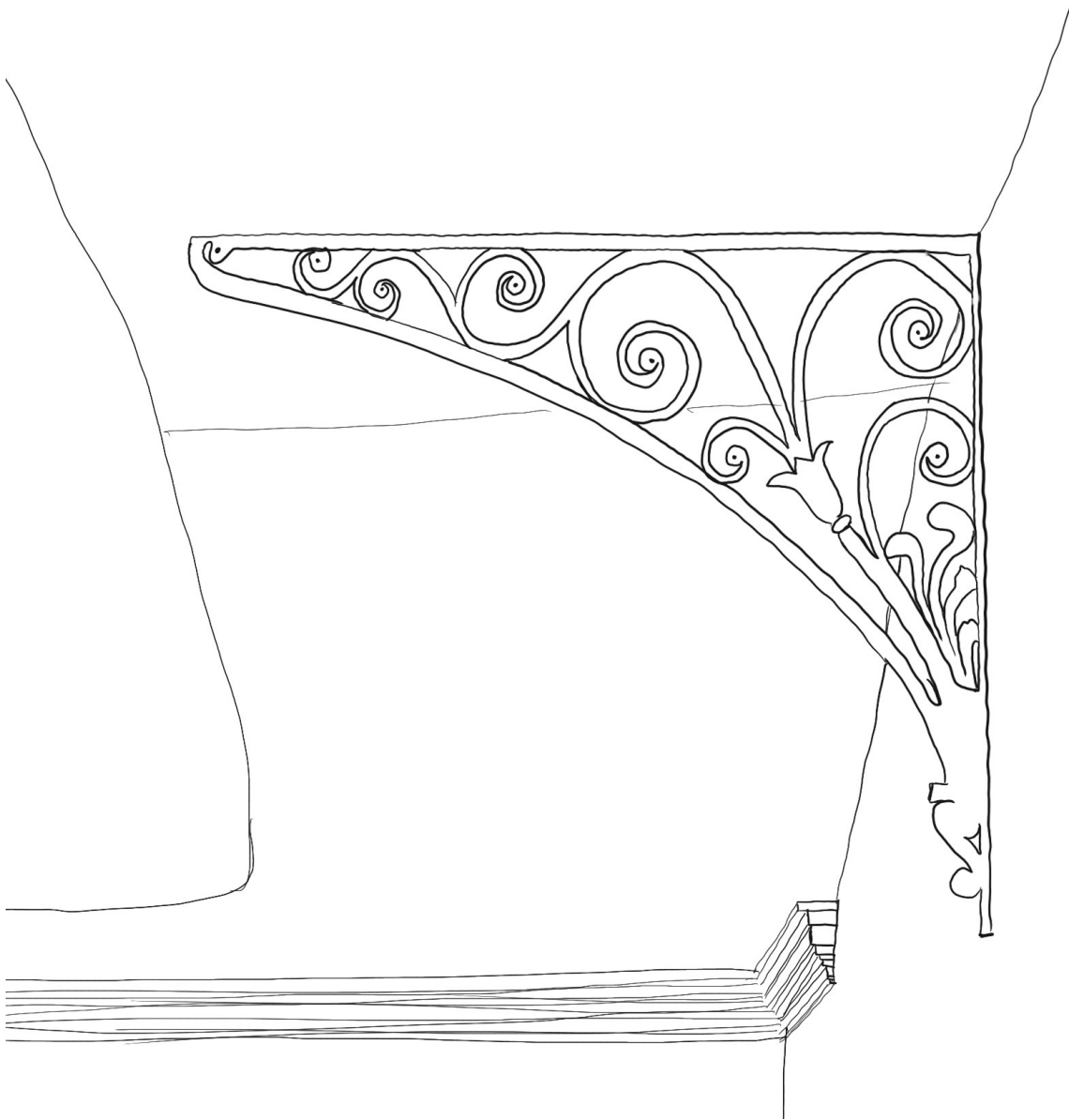


*Fig 41. South Elevation Sketch of the house, Looking from the pond*  
*Draw by author*

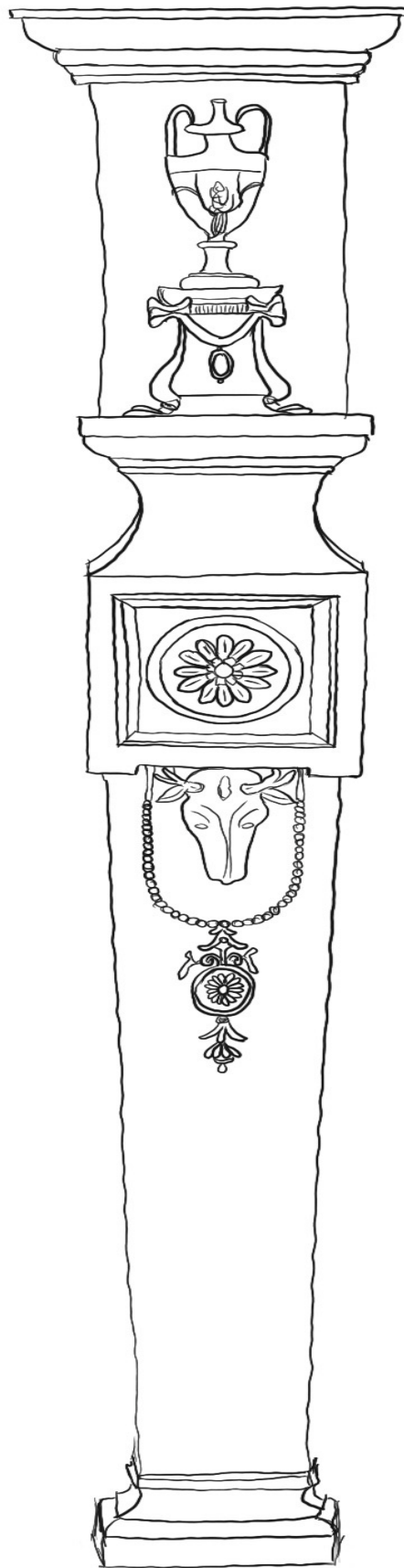


*Fig 43. Sketches of the decorative plaster works which could be seen all around the house, By Robert Adam  
Draw by author*





*Fig 44. Sketches of detailed decoration around the house, By Robert Adam*  
*Draw by author*

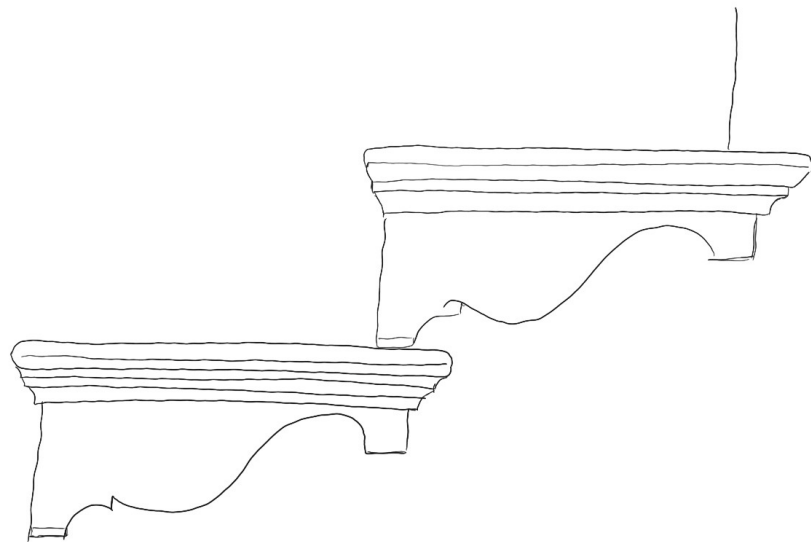


*Fig 45. Detailed sketch of a fireplace in one of the rooms.  
Draw by author*

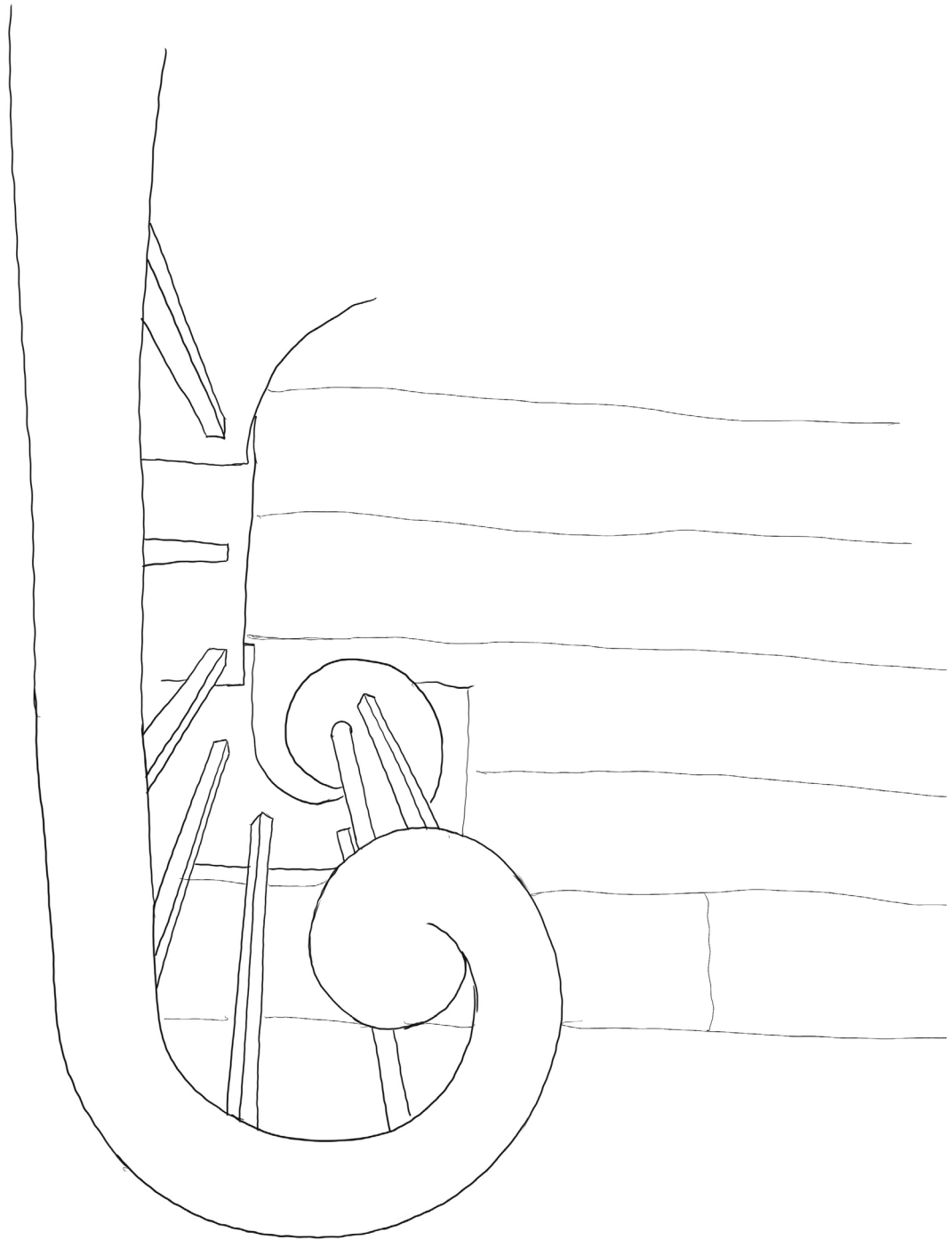


*Fig 46. Detailed sketch of Grand Staircase*  
*Draw by author*

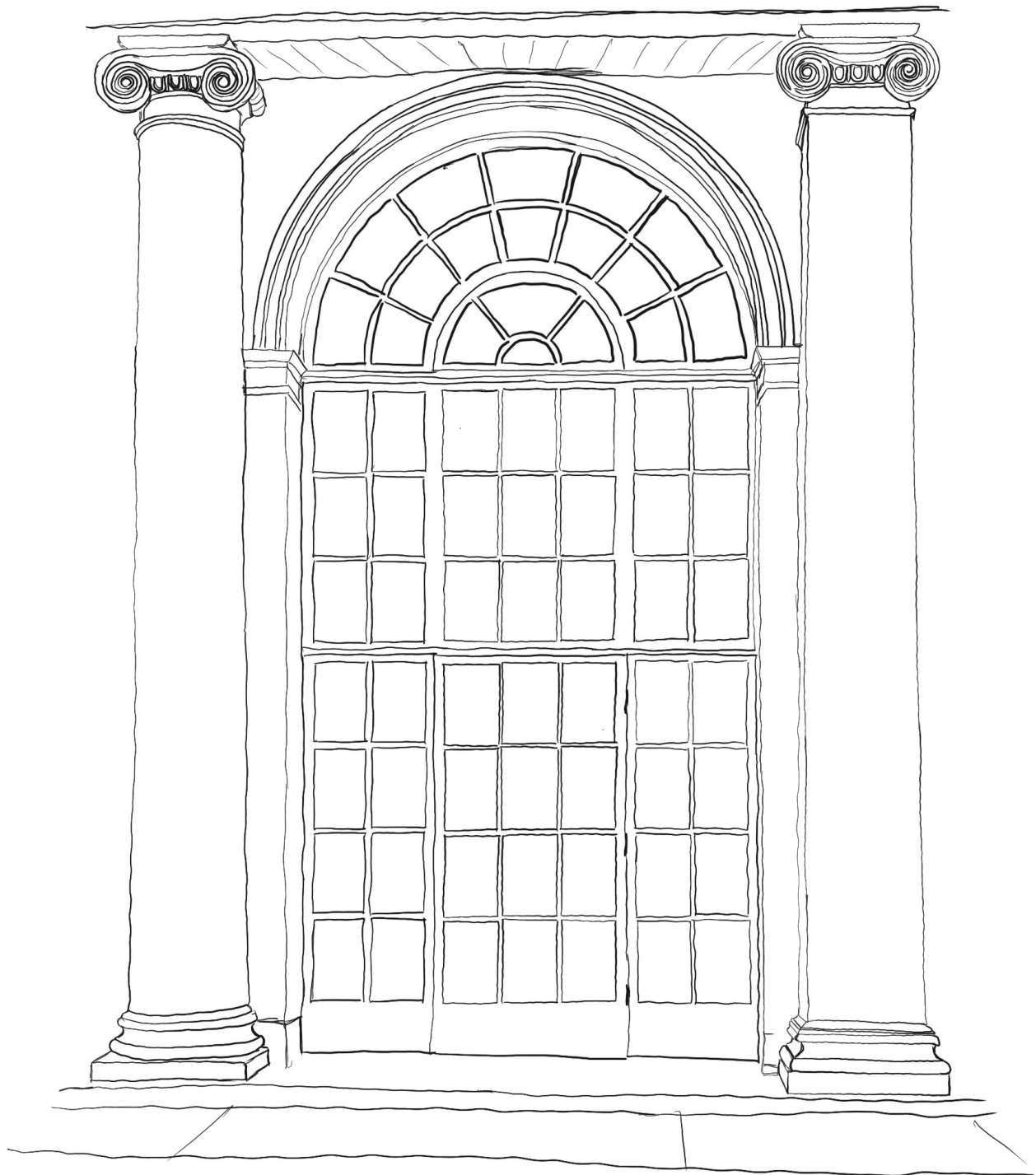




*Fig 47. Detailed sketch of Stairs*  
*Draw by author*



*Fig 48. Detailed sketch of Grand Staircase Handles*  
*Draw by author*



*Fig 49. Detailed sketch of Orangery Window*  
*Draw by author*





*Fig 50. Kenwood Park Main Gates*  
*Photograph by author*





*Fig 51. Furniture and Paintings, in Dining room*  
*Photograph by author*





Fig 52. Plaster Sculptures, in Antechamber  
Photograph by author





*Fig 53. First floor, Bedroom Door, Exterior wall of the original Villa, which is part of the interior walls now.  
Photograph by author*





*Fig 54. First floor Bedroom wall, one of the original walls, which is still available in Kenwood House, and It has not been refurbished  
Photograph by author*





*Fig 55. View from orangery room, looking to the green room and music room  
Photograph by author*





*Fig 56. Breakfast room, which is now like most of the rooms in Kenwood House, filled with paintings*  
*Photograph by author*

# Bibliography



## References

---

Houliston, L. and Jenkins, S. (2014) English Heritage: Kenwood, The Iveagh Bequest. Geoff Neal Group. Musson, J. (2017) Robert Adam. Rizzoli International publication.

Adam, R. (1822) The Works in Architecture of Robert and James Adam, Esqs. Complete in three volumes. London, Priestly & Weale, 5, High Street, Bloomsbury Bolton, T. (1922) Kenwood. London, Published for the trustees of the Iveagh Bequest by Country Life Harris, E. (2001) The Genius of Robert Adam: His Interior. New Haven and London

Des Ewing Residential Architects [online], 2019. [online]. Houzz. Available from:

<https://www.houzz.co.uk/professionals/architects-and-building-designers/c/Kenwood-House--GB> [Accessed

7 Mar 2019].

Hampstead Heath - Hampstead Heath walks, ponds, woodlands and Kenwood House [online], 2016. [online].

Time Out New York. Available from: <https://www.timeout.com/london/things-to-do/explore-hampstead->

heath [Accessed 7 Mar 2019].

Hempstead, Joseph Leslie, 2011. Benezit Dictionary of Artists, 27–246.

Jobs, M., 2018. Kenwood House [online]. On the Grid. Available from:

<https://onthegrid.city/london/hampstead-heath/kenwood-house> [Accessed 7 Mar 2019].

Kenwood [online], 2019. [online]. British History Online. Available from: <https://www.british-history.ac.uk/survey-london/vol17/pt1/pp114-132> [Accessed 7 Mar 2019].

Kenwood House [online], 2016. [online]. Hampstead Village London. Available from:

<https://hampsteadvillagelondon.com/hampstead/kenwood-house/> [Accessed 7 Mar 2019].

Kenwood House [online], 2018. [online]. Foursquare. Available from: <https://foursquare.com/v/kenwood->

[house/4ac518cef964a52034a620e3](https://foursquare.com/v/kenwood-house/4ac518cef964a52034a620e3) [Accessed 7 Mar 2019].

Kenwood House - Official [online], 2019. [online]. Appcrawlr. Available from:

<https://appcrawlr.com/ios/kenwood-house-official> [Accessed 7 Mar 2019].

Kenwood House on Hampstead Heath, history and maps [online], 2018. [online]. A London Inheritance.

Available from: <https://alondoninheritance.com/london-buildings/kenwood-house-hampstead-heath/>

[Accessed 7 Mar 2019].

Kenwood House, corrected plan with later additions. | UK ~ Earls | Pinterest | Kenwood house, House and

Architecture plan [online], 2018. [online]. Pinterest. Available from:

<https://www.pinterest.com/pin/546905948483026296/> [Accessed 7 Mar 2019]. Kenwood House, Hampstead | CLASSIC in 2019 | Pinterest | Kenwood house, House and English manor

houses [online], 2019. [online]. Pinterest. Available from:

<https://www.pinterest.com/pin/236439049173694535/> [Accessed 7 Mar 2019].

Kenwood House, Hampstead | Things or places, London | Pinterest | Kenwood house, House and English manor

houses [online], 2018. [online]. Pinterest. Available from:

<https://www.pinterest.com/pin/453456256211694501/> [Accessed 7 Mar 2019].

kenwood house, London [online], 2018. [online]. Google Search. Available from:

[https://www.google.com/imgres?imgurl=http://2.bp.blogspot.com/\\_5M-hcl4At-c/SyU5BGBGuyI/AAAAAAAAACsg/gfmZyU4HoMQ/w1200-h630-p-k-no-nu/lennon\\_sunroomplan.jpg&imgrefurl=http://kenwoodlennon.blogspot.com/2009/12/kenwood-sunroom-plans-part-](https://www.google.com/imgres?imgurl=http://2.bp.blogspot.com/_5M-hcl4At-c/SyU5BGBGuyI/AAAAAAAAACsg/gfmZyU4HoMQ/w1200-h630-p-k-no-nu/lennon_sunroomplan.jpg&imgrefurl=http://kenwoodlennon.blogspot.com/2009/12/kenwood-sunroom-plans-part-1.html&docid=WY_KpieRWVTs7M&tbnid=pyilu_12QaW_QM:&vet=10ahUKEwje0oPh6e_gAhWRBGM)

[1.html&docid=WY\\_KpieRWVTs7M&tbnid=pyilu\\_12QaW\\_QM:&vet=10ahUKEwje0oPh6e\\_gAhWRBGM](https://www.google.com/imgres?imgurl=http://2.bp.blogspot.com/_5M-hcl4At-c/SyU5BGBGuyI/AAAAAAAAACsg/gfmZyU4HoMQ/w1200-h630-p-k-no-nu/lennon_sunroomplan.jpg&imgrefurl=http://kenwoodlennon.blogspot.com/2009/12/kenwood-sunroom-plans-part-1.html&docid=WY_KpieRWVTs7M&tbnid=pyilu_12QaW_QM:&vet=10ahUKEwje0oPh6e_gAhWRBGM)

[BHcTZBZsQMwg7KAAwAA..i&w=593&h=630&client=opera&bih=627&biw=1366&q=Kenwood plans](https://www.google.com/imgres?imgurl=http://2.bp.blogspot.com/_5M-hcl4At-c/SyU5BGBGuyI/AAAAAAAAACsg/gfmZyU4HoMQ/w1200-h630-p-k-no-nu/lennon_sunroomplan.jpg&imgrefurl=http://kenwoodlennon.blogspot.com/2009/12/kenwood-sunroom-plans-part-1.html&docid=WY_KpieRWVTs7M&tbnid=pyilu_12QaW_QM:&vet=10ahUKEwje0oPh6e_gAhWRBGM)

[and elevations.&ved=0ahUKEwje0oPh6e\\_gAhWRBGM](https://www.google.com/imgres?imgurl=http://2.bp.blogspot.com/_5M-hcl4At-c/SyU5BGBGuyI/AAAAAAAAACsg/gfmZyU4HoMQ/w1200-h630-p-k-no-nu/lennon_sunroomplan.jpg&imgrefurl=http://kenwoodlennon.blogspot.com/2009/12/kenwood-sunroom-plans-part-1.html&docid=WY_KpieRWVTs7M&tbnid=pyilu_12QaW_QM:&vet=10ahUKEwje0oPh6e_gAhWRBGM)

[Accessed 7 Mar 2019].

Overall, A., 2012. Exciting Finds from Kenwood and Hampstead Heath. *Field Mycology*, 13 (3), 93–98.

Plate 98: Ken Wood, plan of the house [online], 2018. [online]. British History Online. Available from:



<https://www.british-history.ac.uk/survey-london/vol17/pt1/plate-98> [Accessed 7 Mar 2019].

Plate 99: Ken Wood, the entrance front [online], 2018. [online]. British History Online. Available from: <https://www.british-history.ac.uk/survey-london/vol17/pt1/plate-99> [Accessed 7 Mar 2019].

S., J., R., B., V., J., L., Z., M., T., M., S., M., S., M., M., W., C., O., S., Helen M., jamieparkins, Sheenal S., Grace K., and Melizza R., 2016. Kenwood House - Hampstead Heath - London, United Kingdom [online]. Yelp. Available from: <https://www.yelp.com/biz/kenwood-house-london-2> [Accessed 7 Mar 2019].

Survey of London: Volume 17, the Parish of St Pancras Part 1: the Village of Highgate [online], 2019. [online].

British History Online. Available from: <https://www.british-history.ac.uk/survey-london/vol17/pt1> [Accessed 7 Mar 2019].

Things to do in London - Hampstead Heath and Kenwood House [online], 2010. [online]. Available from: <https://www.rubyandbjournal.com/things-to-do-in-london-hampstead-heath-and-kenwood-house/> [Accessed 7 Mar 2019].

TripAdvisor, 2016. The pride of Hempstead ! - Reviews, Photos - Kenwood House [online]. TripAdvisor. Available from: [https://www.tripadvisor.in/ShowUserReviews-g186338-d214613-r400956204-](https://www.tripadvisor.in/ShowUserReviews-g186338-d214613-r400956204-Kenwood_House-London_England.html)

[Kenwood\\_House-London\\_England.html](https://www.tripadvisor.in/ShowUserReviews-g186338-d214613-r400956204-Kenwood_House-London_England.html) [Accessed 7 Mar 2019]. TripAdvisor, 2018. On the edge of Hampstead Heath - Review of Kenwood House, London, England [online].

TripAdvisor. Available from: [https://www.tripadvisor.com/ShowUserReviews-g186338-d214613-r510859076-Kenwood\\_House-London\\_England.html](https://www.tripadvisor.com/ShowUserReviews-g186338-d214613-r510859076-Kenwood_House-London_England.html) [Accessed 7 Mar 2019].

Victoria, Museum, A., and Digital Media, 2013. Victoria and Albert Museum [online]. Introduction to 20th-

Century Fashion. Available from: <http://www.vam.ac.uk/content/articles/r/robert-adam-neo-classical-architect/> [Accessed 7 Mar 2019].

Why you should go and explore Kenwood House this weekend [online], 2017. [online]. Evening Standard. Available from: <https://www.standard.co.uk/go/london/attractions/why-you-should-go-and-explore-kenwood-house-this-weekend-a3700841.html> [Accessed 7 Mar 2019].

(FRONT PAGE) Photograph by Author

(Fig. 1) <https://www.npg.org.uk/collections/search/portrait/mw00031/Robert-Adam>

(Fig. 2) Photograph by Author

(Fig. 3) Photograph by Author

(Fig. 4) Photograph by Author

(Fig. 5) Photograph by Author

(Fig. 6) Photograph by Author

(Fig. 7) Photograph by Author

(Fig. 8) Photograph by Author

(Fig. 9) <https://www.donaldheald.com/pages/books/5327/after-robert-adam-james-d-1794/elevation-of-the-north-front-of-kenwood-towards-the-court-elevation-of-the-south-front-of-kenwood>

(Fig. 10) Photograph by Author

(Fig. 11) Photograph by Author

(Fig. 12) Photograph by Author

(Fig. 13) Photograph by Author

(Fig. 14) Photograph by Author

(Fig. 15) Photograph by Author

(Fig. 16) Photograph by Author

(Fig. 17) <http://vipauk.org/enter/poi/lond/k03.html>

(Fig. 18) Photograph by Author

(Fig. 19) L Houliston and S Jenkins, 2014

(Fig. 20) Photograph by Author

(Fig. 21) Photograph by Author

(Fig. 22) <http://willowbrookpark.blogspot.com/2015/11/kenwood-house-part-1-of-3.html>

(Fig. 23) <http://willowbrookpark.blogspot.com/2015/11/kenwood-house-part-1-of-3.html>

(Fig. 24) Draw by Author

(Fig. 25) Draw by Author

(Fig. 26) Photograph by Author

(Fig. 27) Photograph by Author

(Fig. 28) Photograph by Author

(Fig. 29) <https://www.english-heritage.org.uk/visit/venue-hire/corporate-event-hire/corporate-venue-finder/corporate-hire-kenwood-house/event-spaces-kenwood-house/>

(Fig. 30) Photograph by Author

(Fig. 31) Draw by Author

(Fig. 32) Photograph by Author

(Fig. 33) Photograph by Author

(Fig. 34) Photograph by Author

(Fig. 35) Photograph by Author

(Fig. 36) Draw by Author

(Fig. 37) Draw by Author

(Fig. 38) Draw by Author

(Fig. 39) Draw by Author

(Fig. 40) Draw by Author

(Fig. 41) Draw by Author

(Fig. 42) Draw by Author

(Fig. 43) Draw by Author

(Fig. 44) Draw by Author

(Fig. 45) Draw by Author

(Fig. 46) Draw by Author

(Fig. 47) Draw by Author

(Fig. 48) Draw by Author

(Fig. 49) Draw by Author

(Fig. 50) Photograph by Author

(Fig. 51) Photograph by Author

(Fig. 52) Photograph by Author

(Fig. 53) Photograph by Author

(Fig. 54) Photograph by Author

(Fig. 55) Photograph by Author

(Fig. 56) Photograph by Author