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New research on *Leda and the Swan* by Leonardo da Vinci at Wilton House

Nouvelles recherches sur *Léda et le Cygne* de Léonard de Vinci à la Wilton House

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ABSTRACT. This study offers an in-depth reassessment of the critical fate of Leda and the Swan by Leonardo da Vinci, by cross-referencing the analysis of early inventories, erudite seventeenth-century testimonies, Franco-English diplomatic networks, and the mechanisms of historical confusion. It aims at deconstructing the fragile, often arbitrary attributions that have contributed to the marginalization of certain works of the master. By refocusing attention on the Leda kept at Wilton House, regarded until the mid-20th century as a work by Leonardo himself, this research proposes a critical reassessment of its current attribution, considering newly uncovered historical and stylistic evidence.

RÉSUMÉ. Cette étude propose une relecture approfondie du destin de *Léda et le Cygne* de Léonard de Vinci, en croisant l'analyse des inventaires anciens, les témoignages érudits du XVII^{ème} siècle, les réseaux diplomatiques franco-anglais et les mécanismes de confusion historique. Elle vise à déconstruire les attributions fragiles, souvent arbitraires, qui ont contribué à la marginalisation de certaines œuvres du maître. En recentrant l'attention sur la Léda conservée à la Wilton House et qui fut considérée jusqu'au milieu du XXe siècle, comme une œuvre de la main de Léonard, ce travail de recherches propose une réévaluation critique de son attribution actuelle, à la lumière des éléments historiques et stylistiques nouvellement mis en évidence.

KEYWORDS. Leonardo da Vinci, Leda and the Swan, Thomas Howard, Arundel collection, Fontainebleau, Wilton House, earl of Pembroke.

MOTS-CLÉS. Léonard de Vinci, Léda et le Cygne, Thomas Howard, Collection Arundel, Fontainebleau, Wilton House, comte de Pembroke.

1. The Franco-English Cultural Divide Regarding Art in the 17th Century

Between the mid-16th century and the second half of the 17th, France went through a long period during which art, although present at the royal court, was not conceived as a strategic lever nor as a structured heritage reflective of royal power. After the reign of François Ist, a great patron of the Renaissance, his successors, Henri II, Francis II, Charles IX, Henri III, then Henri IV and Louis XIII, established no coherent policy for preserving or centralizing artworks[1]. Although there existed a taste for art, the absence of a royal collection project, coupled with the fragility of institutions, led to a fragmented management of artistic assets. Works circulated freely, offered, exchanged, or sold, without any rigorous documentation to track their movement.

In stark contrast, early 17th-century England adopted a much more aggressive approach in building its collections. At the Stuart court, figures such as Charles Ist, the duke of Buckingham, and the earl of Arundel, with the help of specialized agents, assembled some of the richest collections in Europe[2]. Art became an instrument of prestige, alliance, and diplomacy, integrated into the cultural strategies of the monarchy. Within these dynamic, English ambassadors, merchants, and scholars travelled across Europe, identified major works, and set up genuine acquisition networks, often to the detriment of countries with less structured heritage systems, such as France.

It was in this context that agents such as Balthazar Gerbier were sent to Paris to negotiate on behalf of the duke of Buckingham, the purchase of works from the greatest royal and aristocratic collections. These missions demonstrate the existence of a rapid, discreet, and remarkably organized collection network, capable of operating effectively within a French market that lacked protection. The English, fully aware of the richness of the French patrimony and of the absence of conservation or traceability mechanisms, succeeded in acquiring major works with an astonishing ease.

While England intensified its acquisition efforts, the French monarchy remained largely passive. It was only with the personal reign of Louis XIV, beginning in 1660, that a true centralized museum policy began to emerge[3]. Only then did artworks start to be inventoried, located, and protected at the national level. Until that point, circulation remained largely free and undocumented. Sales, diplomatic gifts, and transfers occurred without any formal oversight, and inventories before the end of the 17th century were incomplete, irregular, and sometimes contradictory. In this context, it is not surprising that several major works, though mentioned in early 17th century sources, later disappeared from the French administrative and heritage records.

Only in the final decades of the century, under the influence of Colbert and Charles Le Brun, did the first systematic inventory initiatives appear, notably with the creation of the King's Cabinet[4]. But by then, many works had already left French territory, dispersed in private collections, given as diplomatic gifts, or incorporated into more ambitious foreign collections.

2. Inventories and Testimonies on Leonardo da Vinci's Leda and the Swan

2.1. *Testimonies on the Works Present at Fontainebleau in the 17th Century*

The lack of documentary and institutional references greatly contributed to the confusion surrounding certain works. In the absence of reliable sources, regular inventories, and a rigorous tracking of artwork exchanges, some theories eventually took root, even when they contained manifest inconsistencies.

This situation undermined the reliability of the few surviving French sources from the period, particularly regarding the traceability of Leonardo da Vinci's Leda. The most valuable testimony confirming its presence in the French royal collections remains that of the collector and scholar Cassiano dal Pozzo[5], who described it as follows:

« Vedemo poi quelli di Leonardo da Vinci… Una Leda in piedi, quasi tutta ignuda col cigno et due uova a pie della figura, della guscia delle quali si vede esser usciti quattro bambini ; questo pezzo è finitissimo, ma alquanto secco e massimamente il petto della donna ; del resto il paese et la verdura è condotta con grandissima diligenza, et è molto per la mala via, perchè, come che è fatto di tre tavole, per lo longo quelle scostatasi han fatto staccar assai del colorito.» (Then we see those of Leonardo da Vinci… A Leda standing, almost completely naked with the swan and two eggs at the foot of the figure, from the shells of which four children appear to have emerged; this piece is very finished, but somewhat dry, especially the woman's breast; the landscape and the greenery are rendered with great diligence, but it is very poorly preserved, because, although it is made of three panels, among them the separations have caused a significant loss of color.)

Another major testimony regarding the works present at Fontainebleau is that of Father Dan, in his book *Trésor des merveilles de la maison royale de Fontainebleau*, published in 1642[6]. Based on direct observation of the château and its collections, this work presents a reasoned inventory of the artworks visible during the first half of the 17th century. Father Dan carefully identified the most significant paintings, their authors when known, as well as their precise location within the château. Far from being a mere descriptive catalogue, this text reveals an implicit hierarchy in the valuation of artworks, wherein the great masters received privileged and codified treatment. This framework makes the absence of any mention of a Leda painted by Leonardo da Vinci more striking.

Father Dan devoted a clear passage to a cabinet specifically dedicated to Leonardo. He wrote the following on pages 135-136 of his book: *« Je donnerai icy le troisième lieu aux Tableaux & riches Peintures de Leonard da Vin, ou da Vinci, homme aussi fameux qu'il y en ait eu en cet Art, & duquel François premier faisoit tant d'estime, que l'ayant fait venir d'œuvre en Œuvre, quelque temps après estant tombé malade en ce lieu de Fontainebleau, ce grand Roy luy fit l'honneur de le visiter ; & l'on remarque mesme qu'il mourut entre ses bras : & de cét excellent Peintre il y a cinq Tableaux en ce Cabinet. »*

He listed five paintings, among them a Virgin and Child supported by an angel, a Saint John the Baptist in the wilderness, a half-length Christ, a portrait of the Duchess of Mantua, and the Mona Lisa, which he explicitly described as a marvel of painting. The precision of these notes shows that the works, each considered at the time to be authentic and prestigious, were carefully highlighted.

Several of these attributions have since been re-evaluated. The Saint John the Baptist in the wilderness is today regarded as a workshop piece, possibly executed after a model by Leonardo. The half-length Christ is generally attributed to Marco d'Oggiono. The portrait of the duchess of Mantua continues to raise questions of attribution. Was it the *Belle Ferronnière (number 16, Le Brun inventory, 1683)*, traditionally identified as Lucrezia Crivelli, mistress of Ludovico il Moro, or the portrait of a woman in profile (number 17, Le Brun inventory, 1683)? To this day, no firm identification has been established. Finally, the Virgin and Child supported by an angel does not correspond to any known work by Leonardo da Vinci. Thus, of the five works mentioned by Father Dan, only the Mona Lisa remains unquestionably a work by Leonardo. The other four, though admired and considered authentic at the time, are today recognized as workshop productions or historically uncertain attributions.

Among the works kept at Fontainebleau during the reign of Louis XIII, Father Dan also mentioned a reclining Leda attributed to Michelangelo, whose state of deterioration was so alarming that he hesitated even to mention it, while still acknowledging its value. He wrote on page 134: *« Il y a en ce Cabinet un Tableau de luy, qui est une Leda couchée ; il est vray qu'il faut dire avec regret, que la malice du temps l'a presque entièrement gâtée ; & quoy qu'il soit ainsi, j'ay creu neantmoins pour la recommandation de ce Cabinet Royal, estre obligé d'en faire icy mention. »*

It was also specified that the works of Michelangelo, like those of Raphael, were reserved for the most prestigious rooms. This was indeed the Cabinet of Paintings, reflecting an intentional hierarchy in the spatial arrangement of artworks within the château.

In stark contrast to the solemnity of the Cabinet of Paintings, some rooms of the château retained a clearly secondary status. Such was the case for the paintings displayed in the bathing rooms, which were intended primarily for decorative purposes. Conceived as spaces of leisure, these rooms were never meant to house masterpieces, but rather ornamental works suited to the atmosphere of the setting. Among other works of lesser importance, Father Dan described another Leda, this time accompanied by Jupiter in the form of a swan, mentioned on pages 95-96 without attribution: *« Il y a en après de suite une troisième Salle, ornée de quatre grands Tableaux […] ; sur la cheminée est un autre Tableau représentant Léda accompagnée de Jupiter, sous la figure d'un Cygne. »*

The presence of Michelangelo's Leda, described as heavily damaged and yet kept in the prestigious royal Cabinet, alongside this anonymous Leda placed in a minor decorative setting, clearly reflects a strict hierarchy in the classification of artworks according to their value and origin.

It is therefore highly implausible that a work relegated to such an unsuitable location as a humid bathing room, without clear identification or special treatment, could have been the work of a master. If Leonardo's Leda had still been visible in the château in 1642, it would almost certainly have been listed among the works explicitly attributed by Father Dan to Leonardo da Vinci, or included in the description of the Cabinet of Paintings reserved for the great masters. The complete absence of any mention of a Leda by Leonardo da Vinci suggests that it was no longer present at Fontainebleau by that date.

Moreover, Abraham Gölnitz[7], in his *Itinerarium Ulysses Belgico-Gallicum* published in 1631, also provided a description of the château of Fontainebleau, detailing the bathing apartments room by room. However, he only noted what he personally deemed of interest, as written on page 169: *« non omnia describo, sed quae mihi visa sunt digna annotatione »* (I do not describe everything, but only what I found worthy of mention.)

The Leda later described by Father Dan in 1642 in *Le Trésor des merveilles de la maison royale de Fontainebleau* appears to have held no interest for Gölnitz. This silence suggests that it was not considered a major artwork of the château.

It remains entirely plausible, however, that this anonymous Leda, placed in one of the bathing rooms, was in fact an old copy made after the work of a master such as Leonardo. At the time, it was common to commission replicas of famous artworks, especially from court painters serving the royal collections. These copies could serve to replace an original, complete a decorative ensemble, or simply ensure the visual presence of a prestigious motif in a secondary space of the palace.

Another fact sheds light on the absence of Leonardo da Vinci's Leda. During an official visit in 1643 by Queen Anne of Austria, accompanied by the Superintendent François Sublet de Noyers, an event is recounted in the *Dissertation sur les Amours des Rois de France*[8], attributed to Henri Sauval (1623–1676). The text refers to an inventory of the château's artworks, aimed at removing those deemed indecent. Michelangelo's Leda is specifically mentioned as a target of this censorship. There is no mention, however, of Leonardo's version, though if the painting had still been present at Fontainebleau at that time, it would almost certainly have been listed as well, given the notoriety of its author and the symbolic weight of its subject. This silence further supports the hypothesis that it had already disappeared early from the royal collections.

2.2. *The 1683 Inventory by Charles Le Brun*

The analysis of these testimonies gains even more weight considering the 1683 inventory compiled by Charles Le Brun[9]. Although it does not constitute a methodical inventory in the archival sense, its objective was to build a prestigious artistic corpus capable of reflecting the grandeur of the sovereign.

From the reign of Louis XIV onward, a profound transformation took place in the royal policy for the conservation of artworks. When the king established his permanent residence at Versailles in 1682, he initiated a vast reorganization of the royal collections, intended to project the majesty of his power from this new center of monarchy. This move led to the transfer of the most prestigious artworks to Versailles. The following year, upon the death of Queen Maria Theresa of Austria, an inventory was drawn up by Charles Le Brun, First Painter to the King, tasked with locating, describing, and attributing the Crown's paintings spread across various residences.

Versailles thus became not only the seat of government, but also the artistic showcase of absolute monarchy. Many of the most important works kept at Fontainebleau had already been transferred to Paris, notably to the Louvre and the Tuileries, even before Versailles became the primary residence. However, from the 1680s onward, and more so after the court settled at Versailles in 1682, a selection process was undertaken to supply the new royal residence. Works deemed major, or worthy of display within the sumptuous setting of absolute monarchy, were then transferred to Versailles. This process explains why certain works from Fontainebleau appear in the inventory compiled by Charles Le Brun in 1683, while others, deemed secondary or devalued, are absent from it.

At that time, Fontainebleau, although it had been, since François Ist, the nerve center of the royal court's development and the main site for hosting early Italian masterpieces, lost its status as the monarchy's artistic capital. It gradually became a secondary residence, more associated with hunting stays than with the representation of royal authority.

In his 1683 inventory, Le Brun systematically recorded all the works attributed to Leonardo da Vinci, whether by his own hand or from his workshop, presenting them all as works by Leonardo himself. Some of these paintings, now recognized as by his pupils, were thus included in the Leonardo corpus without distinction. The purpose of this undertaking was to magnify the royal collection through the accumulation of great names, even if it meant stretching attributions.

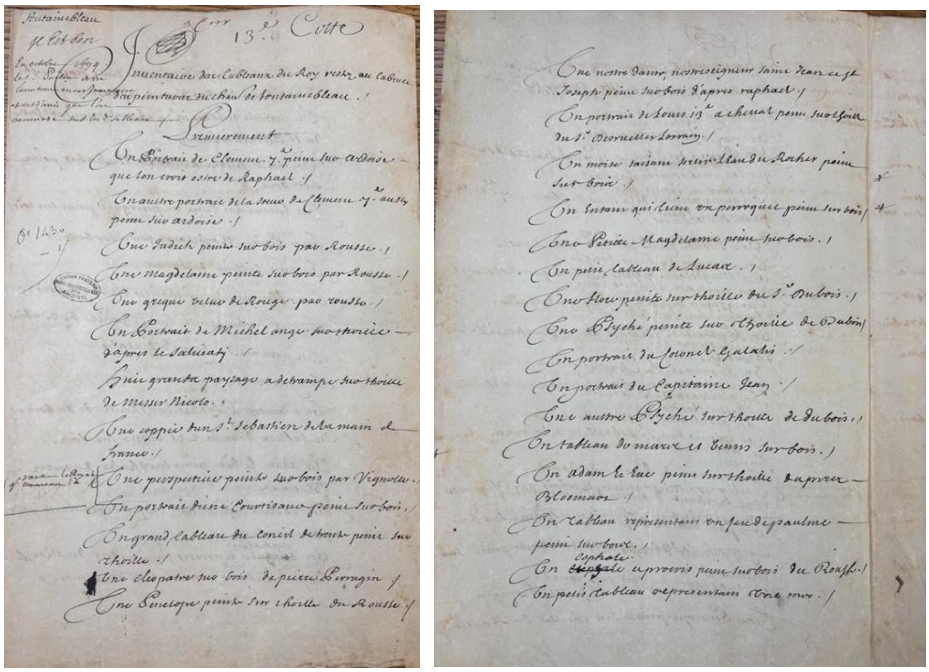
The importance attached to Leonardo was such that Le Brun did not hesitate to travel personally to locate and integrate paintings that could enrich the king's collection. He overlooked no masterpiece. In this context, it seems highly implausible that Leonardo da Vinci's Leda, had it still been present in the royal collections, could have been neglected or excluded from the inventory, yet it does not appear in it. Especially since Le Brun did not hesitate to mention a simple drawing attributed to Michelangelo. He noted under item no. 369: *« Un dessin de Michaelange représentant une Leyda »*, haut de 5 pieds, large de 6 pieds 9 pouces. » (A drawing by Michelangelo representing a Leda, 5 feet high, 6 feet 9 inches wide.)

Despite its nudity and lascivious nature, the argument that Leonardo's *Leda and the Swan* might have been excluded for moral reasons cannot be sustained.

However, considering the methodology used by Le Brun in compiling the inventory, a lesser work may well have been deliberately omitted. The Leda described by Father Dan in the bathing room, lacking attribution, would have had no relevance for inclusion. This inventory, conceived to affirm the prestige of the French monarchy and compete with the great European collections, was not intended to record every artwork in the royal residences, but only those considered sufficiently remarkable to enhance the symbolic grandeur of the reign.

2.3. *The 1692 Inventory: Context and Doubts*

The 1692 inventory of paintings remaining in the King's Cabinet at Fontainebleau[10], rediscovered by Félix Herbet[11] in 1889, appears to correspond to the remnants of a royal collection that had been partially dismantled or downgraded *(figure 1).* This is not a list of recognized masterpieces, but rather a set of works relegated to secondary spaces, often considered to be copies, decorative pieces, or of little value.



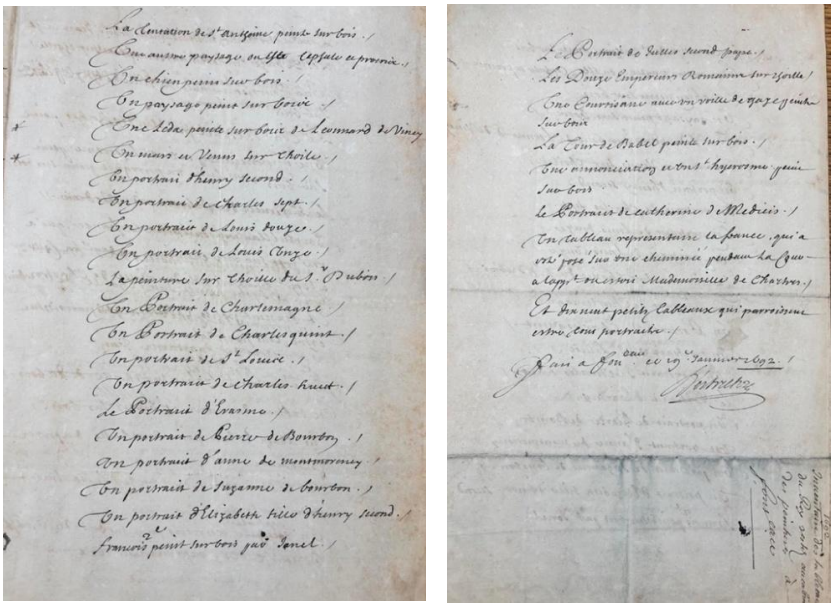


Figure 1. *Inventory of paintings from Fontainebleau, 1692*
National Archives, reference 0/1/1430

The inventory begins with a major name of the Italian Renaissance: *« Un portrait de Clément VII, peint sur ardoise, que l'on croit de Raphaël »* (A portrait of Clement VII, painted on slate, believed to be by Raphael). The phrasing *« que l'on croit de »* (believed to be by) was used in the 17th century to refer to a high-quality work evoking the style of a master, but without confirmed authorship. It was a way of suggesting a traditional or stylistic attribution, without asserting it. This was therefore not a recognized original, but most likely an esteemed copy.

A little further down appears the name of another great Renaissance artist: *« Une Cléopâtre sur bois de Pierre Pérugin »* (A Cleopatra on wood by Pietro Perugino). According to Father Dan's descriptions, three works by Perugino were once present at Fontainebleau. Yet Le Brun, in his own inventory (which was stricter and focused on valuable works), retained only one. Cleopatra does not appear in it. This suggests that the work was already considered doubtful. Indeed, the subject does not belong to Perugino's repertoire, and the theme is entirely anachronistic in the artistic context of his time. Though derived from ancient sources such as Plutarch, the figure of Cleopatra only began to be depicted by artists in the Leonardesque tradition, such as Giampietrino or Leonardo da Pistoia, who produced versions marked by sensuality and solemnity. The motif gained wider prominence during the 17th century, notably with Guido Reni, Artemisia Gentileschi, Alessandro Turchi, and Claude Vignon. Its presence in the 1692 inventory thus suggests a downgraded work, relegated among others deemed minor in Fontainebleau's collection.

The inventory continues with a long list of mythological or profane works produced by court painters such as Dubois, Rousse, Lucas, or unnamed artists. These are a series of paintings intended for decoration, located in secondary spaces, passageways or leisure areas—such as galleries, small cabinets, or bathing rooms. From the works listed, one clearly recognizes the genre of ornamental painting, well documented in 17th-century royal residences. These light, often repetitive mythological or profane scenes were designed to enhance the atmosphere of such places. And between *« un paysage peint sur bois »* (a landscape painted on wood) and *« Mars et Venus peint sur thoile »* (Mars and Venus painted on canvas), the inventory notes: *« Une Léda, peinte sur bois, de Léonard de Vincy »* (A Leda, painted on wood, by Leonard de Vincy).

The subject's description is strikingly terse. There is no mention of the swan or any compositional details. Yet the inventory is capable of being precise: elsewhere it describes « *un enfant qui tient un perroquet* » (a child holding a parrot), which proves the writer could be detailed when needed. This silence surrounding the Leda raises doubts. Furthermore, the painting is listed without emphasis, among

secondary, sometimes anonymous works. Nothing in the structure of the text suggests that we are dealing with an exceptional painting.

In an inventory of royal collections, especially in the late 17th century, when artworks were imbued with strong symbolic value and inventories served to reflect the grandeur of royal taste, it is inconceivable that an authentic painting by Leonardo da Vinci would have been relegated among purely decorative works without receiving a more developed notice or special distinction.

It is therefore likely that this Leda was a copy, or a misattributed painting, much like the Cleopatra by Perugino that also appears in the same inventory. It might also correspond to the Leda described by Father Dan, once located in a bathing room and surrounded by mythological or profane works. It would then be a decorative copy that later ended up among devalued works. It is also possible that the painting never represented Leda in the strict sense and was rather a female nude later interpreted as such. At the time, a nude woman could easily be identified as Leda, Venus, or Mary Magdalene. This iconographic ambiguity is common in old inventories.

The nude *Mary Magdalene* painted by Giampietrino offers a striking example of these ambiguous female figures. In the photo archives of art historian Francesco Zeri, the work is described as muse-like nymph *(figure 2)*. This uncertainty of identification can partly be explained by the model's posture or by the fact that her face is the same as that of another Leda attributed to the same artist *(figure 3)*. Indeed, one finds the same body, the same expression, the same construction of the gaze, elements that could have fueled the confusion.

In some cases, the painter himself seems to have played with this ambiguity. For example, a representation of Mary Magdalene *(figure 4)*, although holding the traditional jar of perfume, is surrounded by nude children, in a scene that strongly recalls Leda compositions. This intentional, or at least accepted, shift between sacred and mythological iconographies reflects a visual language inherited from Leonardo, in which female figures become fluid archetypes: at once sensual, spiritual, and symbolic.

Figure 2. *Mary Magdalene*
Giampietrino
Photo archive Francesco Zeri
Photogravure produced in France by Allinari,1880

Figure 3. *Leda surrounded by her children*
Giampietrino
Uffizi Gallery

Figure 4. *Mary Magdalene surrounded by angels*
Giampietrino
Museum of fine arts, Budapest

Giampietrino's Leda depicts, in fact, a nymph without the presence of a swan, only a nude woman surrounded by children. There are therefore known representations of Leda without the bird.

The figure known as Donna Vanna *(figure 5)* has also been subject to many interpretations, oscillating between mythological representations, Neoplatonic allegories, and variations on the nude Mona Lisa. Certain painted versions, sometimes of uneven quality, circulated as early as the 17th century within major European collections, often without any explicit mention of their origin.

Figure 5. *The Nude Mona Lisa*
Drawing in black and white chalk
Attributed to the circle of Leonardo da Vinci
Condé Museum, Château de Chantilly

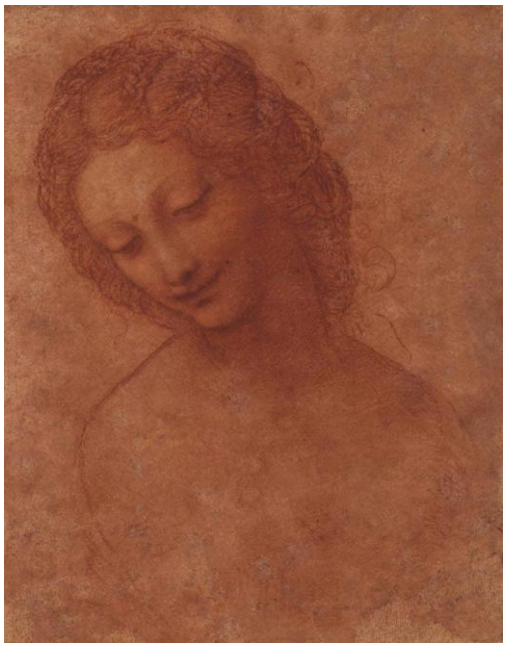


Figure 6. *Study for Leda*
Sanguine sur papier
Leonardo da Vinci
Castello Sforzesco

This work, today attributed to a pupil of Leonardo, clearly bears witness to the master's influence. The braided hairstyle and the features of the model strongly recall a study preserved at the Castello Sforzesco, identified as a Leda *(figure 6).* These striking resemblances suggest that this figure may have been interpreted as a portrait of Leda, following Leonardo's exploration of the ideal woman, a theme

taken up by a student or follower. Moreover, the model's features, both delicate and pronounced, evoke those of Salaï, Leonardo's pupil and favored model, whose androgynous appearance was often used in his female figures.

After a long series of mythological subjects, the inventory shifts to a set of historical portraits. These include figures from the French monarchy, political or religious leaders, and members of the high nobility.

The very nature of these works suggests a dynastic representational function, with political or commemorative aims. They were likely produced in series, often in court workshops, intended to illustrate the continuity of power and monarchic or imperial heritage, rather than to meet high aesthetic standards. Their presence in the inventory confirms that the collection consisted of decorative works, lacking genuine artistic value.

The inventory closes with a dated note : *« Fait à Fontainebleau, ce 19 janvier 1692. D'Estréchy.»* (Done at Fontainebleau, this 19 January 1692. D'Estréchy.)

2.4. *The Paillet Inventory, 1694-1695*

In 1694, the king's commissioner, Paillet, reviewed this inventory and, in an administrative initiative, recommended its incorporation into the general inventory. This inventory[12], titled *« Inventaire général des tableaux du Roy qui sont à la garde particulière de Paillet à Versailles, Trianon, Marly, Meudon et Chaville »* (General inventory of the King's paintings under the particular care of Paillet at Versailles, Trianon, Marly, Meudon and Chaville), was drawn up without an explicit date *(figure 7).* Although the original order and initial operations date back to 1694, several registers bear the note *« relevé en 1695 »* (recorded in 1695), confirming that its execution extended over two years. Thus, by convention, it is referred to as the 1694-1695 Paillet Inventory.

The inventory is organized by artist's name, in a deliberate effort to clarify and consolidate data from previous inventories. It includes numbering, measurements, and handwritten annotations noting physical verifications or attribution corrections. Ten works considered to be by Leonardo da Vinci are listed, all located at Versailles.

Notably, Paris, and especially the Louvre Palace, as well as Fontainebleau, were not included in the scope of this inventory, as those royal residences were no longer active. By the time of the inventory, no valuable royal artworks remained in them. Pieces by Leonardo da Vinci, Raphael, and Titian had long since been transferred to the court's active residences.

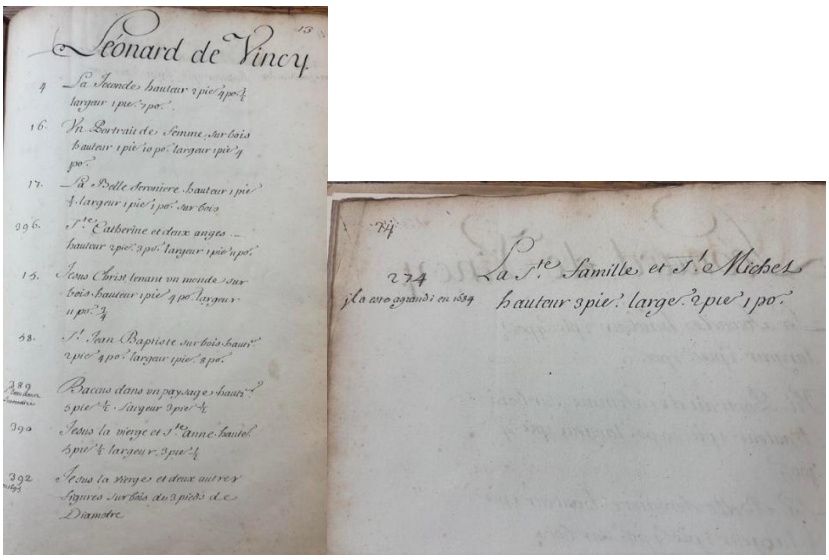


Figure 7. *Inventory by Christophe Paillet, 1694/1695*
National Archives , reference 0/1/1978B

In his inventory drawn up in October 1694, Paillet undertook a complete revision of the royal collections, aiming to correct the errors found in previous inventories. This meticulous work was logically meant to incorporate the artworks listed in the partial inventory written by d'Estréchy in January 1692, which Paillet consulted and recommended to be included in the general corpus. Ten works by Leonardo da Vinci are recorded therein, yet Leonardo's Leda is not among them, as Antoine Schnapper pointed out[13]. It is therefore likely that Paillet considered this Leda a doubtful attribution. Moreover, it is important to stress that the hypothesis suggesting this major work might have left the royal collections without leaving the slightest documentary trace appears highly improbable from a historical standpoint. At that time, and even more so under the reign of Louis XIV, the administration of artworks was increasingly attentive to their preservation, inventorying, and valorization. The logic was not one of neglect, but of expanding the royal artistic heritage. Had the Leda been officially ceded, moved, or destroyed, a written record would necessarily have been left behind.

Furthermore, as Carlo Goldoni noted in 1775, the painting does not appear on the list of destroyed works, which invalidates the hypothesis of its removal for moral reasons, often attributed to Madame de Maintenon. He explicitly states[14]: *« cette peinture n'était pas mentionnée sur la liste des tableaux détruits dans une intention bien malencontreusement pieuse »* (this painting was not mentioned on the list of artworks destroyed in a most unfortunately pious intent).

This total absence of any official trace is more striking as it relies on a single attestation: the inventory of 1692, signed by a certain d'Estréchy. This name appears in no official register of curators, painting keepers, or specialists of the king's cabinet. He was not part of the circle of connoisseurs, nor of the royal artistic administration. He seems to have held no formally recognized role in the management of the collections. All indications suggest he was an administrative officer, temporarily tasked with documenting the remaining paintings at Fontainebleau at that date. His intervention therefore does not reflect expert work nor that of an art historian. This implies that the attributions in the inventory, such as the Leda attributed to Leonardo da Vinci or the Cleopatra to Perugino, cannot be considered official validations. It is likely the compiler simply transcribed old designations found on the existing labels in the rooms. Concerning the so-called Leda by Leonardo, the attribution seems to have rested only on the vague memory of a once-mentioned artwork.

To better understand the nature of d'Estréchy's inventory, one must consider the historical context of the time. In 1692, all prestigious artworks from Fontainebleau had already been transferred to Versailles, in line with the centralization policy implemented under Louis XIV[15]. As early as 1682, a large-scale reorganization of the royal collections was launched. This policy sought to gather masterpieces exclusively in the court's active residences. Charles Le Brun, as First Painter to the King, personally oversaw these campaigns of transfer and inventory, applying a rigorous method and imposing a hierarchy of works consistent with the criteria of royal representation. Henceforth, the king's cabinet at Fontainebleau played no strategic or artistic role, it became a marginal space, relegated to storing works considered of little value, such as copies, downgraded paintings, or uncertain attributions, left behind through successive rearrangements.

This is precisely what d'Estréchy's document reveals, which mentions a Cleopatra by Perugino, described in the king's cabinet by Father Dan in 1642. Yet Charles Le Brun, during his surveys for the 1683 inventory, did not list it. The work had likely been downgraded and deemed unimportant. It is important to recall the precise role of this commissioner. He did not merely establish inventories, as First Painter to the King, Director of the Royal Academy of Painting and Sculpture, and above all, Superintendent of the King's Buildings, he exercised considerable authority over the entire royal collection[16]. He was responsible for commissions, restorations, transfers, and for the placement of artworks, that is, their display within the king's residences.

In the archives of the King's Buildings, there are explicit mentions of his authority, in the often-repeated phrase: *« disposition des tableaux selon l'ordre arrêté par M. Le Brun »* (arrangement of the paintings according to the order set by Mr. Le Brun). His 1683 inventory thus reflects deliberate choices, based on aesthetic, political, and symbolic criteria. That a work does not appear in it means it was not deemed worthy of inclusion in this new gallery of monarchical power.

In the record compiled by d'Estréchy in 1692, two artworks mentioned had already been noted by Father Dan during his visit to Fontainebleau in 1642. These were two mythological scenes, then located in one of the bathing rooms reserved for ornamental works lacking distinctive value. These two subjects *Léda accompagnée de Jupiter métamorphosé en cygne* (Leda accompanied by Jupiter metamorphosed into a swan) and *Mars et Vénus* (Mars and Venus), reappear in d'Estréchy's inventory, now listed in the king's cabinet.

It is worth noting that, in both d'Estréchy's inventory and Father Dan's description, the Leda is mentioned immediately before Mars and Venus, suggesting a physical proximity of the two paintings at the time of observation. It is therefore highly likely that these paintings were moved at the same time from their original location to a new space. It was likely at this moment that the Leda was linked to the prestigious name of Leonardo da Vinci. This type of reattribution was common in late inventories, where gaps were filled by assigning certain works to famous names, sometimes by tradition, sometimes for convenience. Yet, had this work truly been Leonardo da Vinci's Leda, it is entirely implausible that it could have escaped previous inventories and testimonies.

It must be recalled that André Félibien (1619–1695), royal historiographer and Superintendent of the King's Buildings from 1666 onward, never once mentioned a Leda by Leonardo da Vinci in his writings, notably in his famous *Entretiens sur les vies et les ouvrages des plus excellents peintres* (Conversations on the Lives and Works of the Most Excellent Painters, published between 1666 and 1688). This work, which played a key role in shaping official taste under Louis XIV, reflects the attention given to great Italian masters and emblematic works of the royal collections. The total absence of any reference to a Leda reinforces the idea that no such work was then identified as Leonardo's.

As for Charles Le Brun, appointed Superintendent of the King's Buildings in 1664, he exercised full authority over the collections until his death in 1690. For twenty-six years, he was the true arbiter of monarchical taste. A work of such stature, attributed to a master as renowned as Leonardo da Vinci, simply could not have gone unnoticed under his authority, let alone unrecognized, unrecorded, or undervalued. Especially since Leonardo already enjoyed exceptional renown at the time, which would naturally have drawn attention.

Therefore, can full credibility be granted to d'Estréchy's inventory, the only one to mention the work in 1692, since the testimony of Cassiano del Pozzo in 1625?

2.5. *Inventory by Nicolas Bailly, 1709-1710*

The inventories of the royal collections reflect a clear intent to gather works presumed to be by the hand of Leonardo da Vinci across the various royal residences. However, this undertaking was sometimes accompanied by speculative or even clearly forced attributions, revealing a stronger desire for prestige than for historical accuracy. After the inventory drawn up by Paillet, then ordinary keeper of the king's paintings, another inventory recorded in the National Archives was attributed to his successor, Nicolas Bailly (figure 8). This document, which bears neither author nor date, is today dated to the years 1709–1710. It is archival sources and marginal annotations that have enabled researchers to propose this dating.

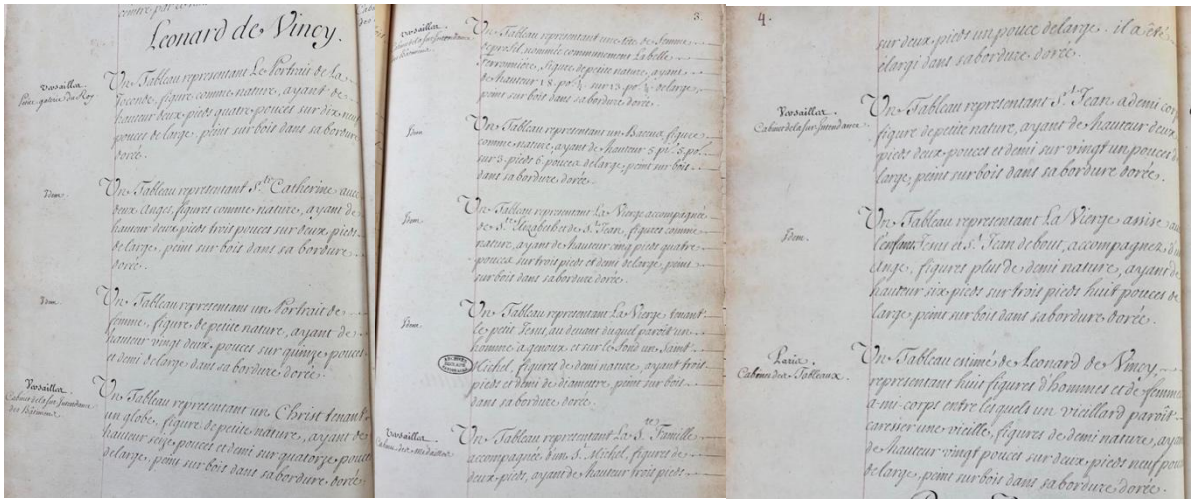


Figure 8. *Inventory by Nicolas Bailly, 1709/1710*
National Archives, reference 0/1/1978A

In the inventory by Bailly[17], of the twelve paintings attributed to Leonardo, eleven were kept at Versailles. Nine of them had already appeared in the list of ten paintings inventoried by Paillet, sometimes under different titles, but with recognizable sizes and subjects. *La Sainte Anne, la Vierge et l'Enfant*, now at the Louvre, is certainly described as *la Vierge accompagnée de Sainte Élisabeth et de Saint Jean* (the Virgin accompanied by Saint Elizabeth and Saint John), while Paillet refers to it as *Jésus, la Vierge et Sainte Anne* (Jesus, the Virgin and Saint Anne). In Bailly's record, the painting measures 5 feet 4 inches high by 3 and half wide (approximately 174 cm × 114 cm). The one in Paillet's inventory has the exact same width (3 feet 1/2) and a very close height (5 feet 1/2 instead of 5 feet 4 inches), a difference of roughly 6 centimeters. Everything indicates that these may refer to the same composition described under two different titles.

It should be recalled that measurements in Ancien Régime inventories were often approximate, taken with a toise or old French foot, without standardized precision. A difference of a few centimeters was common, especially when the frame was or wasn't included, which was not always specified. Compared with the current dimensions of the painting in the Louvre (168 × 130 cm), we see that the height is slightly lower than in the inventories (approximately 5 feet 1,5 inches), while the width is larger (almost 4 full feet). This confirms the indicative, non-standardized nature of period measurements.

Another example: a circular painting measuring 3 feet 1/2 in diameter in Bailly's manuscript depicts *la Vierge, l'Enfant, un homme agenouillé et un Saint Michel en arrière-plan* (the Virgin, the Child, a kneeling man, and a Saint Michael in the background). This is very likely the same as Paillet's listing of *Jésus, la Vierge et deux autres figures* (Jesus, the Virgin, and two other figures), which measures exactly 3 feet in diameter. Here again, the difference in title reflects a variation in iconographic interpretation.

Moreover, the tradition of late 17th century inventories calls for caution. Some copies or works inspired by a master were sometimes elevated to the rank of authentic works. A telling example appears in the inventory drawn up by Charles Le Brun in 1683, where a painting recorded under number 395 is attributed to Quentin Metsys. Yet, about twenty years later, Bailly, then keeper of the king's paintings, reassigned the same painting to Leonardo da Vinci. It was scene of Merry Company in which Metsys had clearly borrowed, for one of the figures, a motif inspired by the Leonardo tradition. This partial reinterpretation, based on a mere stylistic quotation, shows how some attributions could evolve with the tastes or hierarchies of the time.

As Max J. Friedländer[18] reminds us, even the most meticulous commissioners, like Bailly, remained dependent on an oral and documentary tradition already partially altered. Their reports, far from infallible, inherited transmission errors that they reproduced without always questioning them, thus helping to perpetuate weak attributions or locations. This was most certainly the fate reserved for the

famous Leda by Leonardo da Vinci, which some still believed to be present in the royal collections at the end of the 17th century. This confusion, born from a convenient and never verified reattribution, perfectly illustrates a chain of transmission in which the authority of a name ended up replacing both the examination of the work and the coherence of documentary records.

3. A *Leda and the Swan* by Leonardo da Vinci in the collection of the earl of Arundel

In 1627, a work identified as a Leda by Leonardo da Vinci was found in the collection of theearl of Arundel in England. Thomas Howard, 14th earl of Arundel, known as the collector earl, was one of the foremost figures in 17th century collecting[19]. As Vanessa Knight, archivist at the Royal Society, points out, his passion for art and antiquities was such that his collection rivalled King Charles Ist's in both quality and size.

The presence of a painted work by Leonardo da Vinci in the collection of the earl of Arundel is also confirmed by a drawing (*figure 9*) made in 1627 by Luca Vorsterman, one of the most important engravers of the 17th century and a regular collaborator of Rubens. This drawing bears a Latin inscription: *"Leonardo da Vinci pinx. / Leda ex collectione Arundel / LV fecit 1627"*, which can be translated as: "*Leda painted by Leonardo da Vinci, from the Arundel collection, made by Luca Vorsterman in 1627*.

Figure 9. *Drawing after the Leda of Wilton House*
Luca Vorsterman, 1627

An elite engraver, Lucas Vorsterman produced this type of drawing only for works of major importance, recognized as reference pieces. These were often true graphic inventory records, designed to preserve or disseminate the major masterpieces of his time. This drawing therefore attests both to the prestige attributed to this Leda and to its status as an exceptional work, worthy of being reproduced and preserved in the artistic and scholarly circles of the 17th century.In 1631-1632, the earl also commissioned Vorsterman to reproduce one of Holbein's Triumphs[21], a commission that testifies to the care given to the preservation and dissemination of key works.

The painting that served as a model for Vorsterman's drawing is today held by the 18th earl of Pembroke, William Herbert, along with the Trustees of the Wilton House Trust. It was identified in the 1655 inventory of the Arundel collection, drawn up after the death of the countess, and passed down by inheritance to the family of the earls of Pembroke. In this inventory, the work is explicitly mentioned as an original work by Leonardo da Vinci[16]. In the mid-20th century, the work was downgraded by Kenneth Clark to a studio production and hypothetically attributed to Cesare da Sesto. This decision was based solely on the inventory by d'Estréchy of 1692[10]. No material, stylistic, or documentary evidence supported this reassignment.

This reclassification introduced a lasting fracture in the reading of the Leonardesque corpus, as it dragged down with it a group of very high-quality drawings that had previously been attributed to Leonardo on solid stylistic grounds. A visual framework thus imposed itself, marginalizing major works based on a logic of forced consistency. As a result, the entire Leda corpus associated with Leonardo was skewed along with our understanding of how Leonardo contributed to shaping this mythological theme.

In the second half of the 20th century, many drawings previously attributed to Leonardo were suddenly re-evaluated, often based on highly questionable technical criteria. One of the most widespread involved judging the direction of the stroke: if the hatching moved from bottom right to top left, or top left to bottom right, it was considered compatible with a left-handed artist. But if the movement went the other way, the drawing was immediately excluded from the Leonardesque corpus. The reasoning assumed that a left-handed stroke must necessarily follow that reversed ascending diagonal, excluding all other possibilities. A simplistic and analytically poor criterion, to say the least.

The direction of a line indicates not the hand used, but the gesture's dynamic. Contrary to what some judgments have assumed, a left-hander is not limited to a single hatching direction. It is true that the movement from bottom right to top left occurs fluidly and naturally for a left-hander, as the wrist remains aligned, and the gesture follows its instinctive path. But when wishing to hatch in the opposite direction, the left-hander simply tucks the wrist inward to the right, thus changing the angle of attack without losing precision or flexibility.

Leonardo composed his forms based on light, volume, gaze, or the movement he wished to express. Reducing the complexity of his drawing to a single direction of hatching amounts to denying the very nature of his graphic intelligence. This misjudgment explains why some remarkably high-quality drawings may have been unjustly excluded from his body of work.

Furthermore, the idea that Leonardo was exclusively left-handed is now considered a misconception. Analyses carried out by the Opificio delle Pietre Dure in Florence, under the supervision of Cecilia Frosinini, have scientifically proven that Leonardo was ambidextrous, even in his earliest known works.

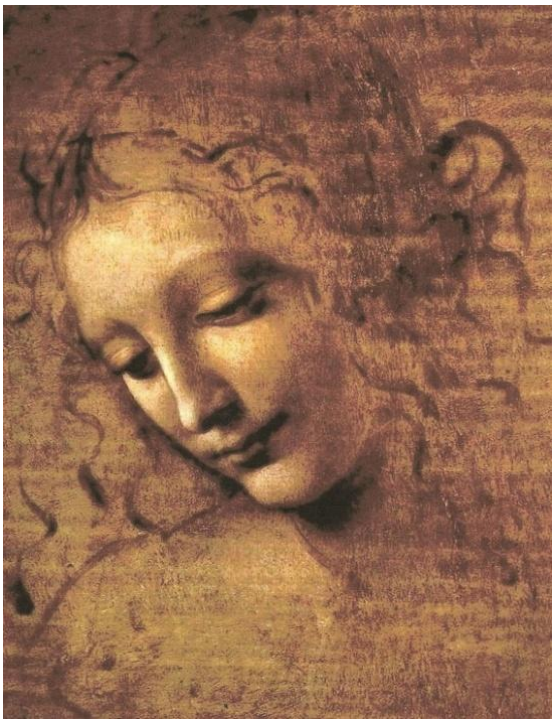


Figure 10. *La Scapigliata*
Leonardo da Vinci
National Gallery, Parma

Figure 11. *The angel from the Virgin of the Rocks*
Leonardo da Vinci
National Gallery

Even today, Leonardo da Vinci remains partially misunderstood, and certain works like *Scapigliata (figure 10)* eloquently bear witness to this. Although its formal quality is undeniable, it has been excluded by some scholars[22] from the Leonardesque corpus due to its atypical character. Yet what is sometimes interpreted as incompleteness is, on the contrary, the result of a fully intentional approach. Executed directly on an unprepared poplar panel, in oil, with a deliberately reduced palette composed mainly of earth tones and white, *Scapigliata* was never meant to be a finished work. It is neither a fragment nor an abandoned study, but rather a rigorously constructed investigation centered solely on the face, which Leonardo isolates to make it the focus of expression.

The absence of treatment in the hair or background should not be seen as a flaw, but as a deliberate strategy of simplification aimed at concentrating the visual effect on light, volume, and the emotion of the gaze. Through subtle sfumato work, Leonardo manages to bring forth a figure that seems to breathe, without any sign of hesitation or technical weakness. The modeling of the forehead, the softness of the cheek, and the suspended tension of the mouth form a face that feels alive and animated conveying the same pursuit of interiority that can be seen in the angel from *the Virgin of the Rocks* kept at the National Gallery *(figure 11)*, which remains difficult to replicate.

It would therefore be troubling to de-attribute a drawing of such mastery in the name of a narrow view of Leonardo's technique. His art never followed a fixed method. On the contrary, it sought to experiment and constantly explore new paths, depending on the nature of the subject or the inner intention. In this case, the drawing was clearly intended to bring the soul to the surface of the material itself.

Figure 12. *Anatomic studies of dog*
RCIN 912361

Figure 13. *Standing Nude Man*
RCIN 912596

Royal collection Trust

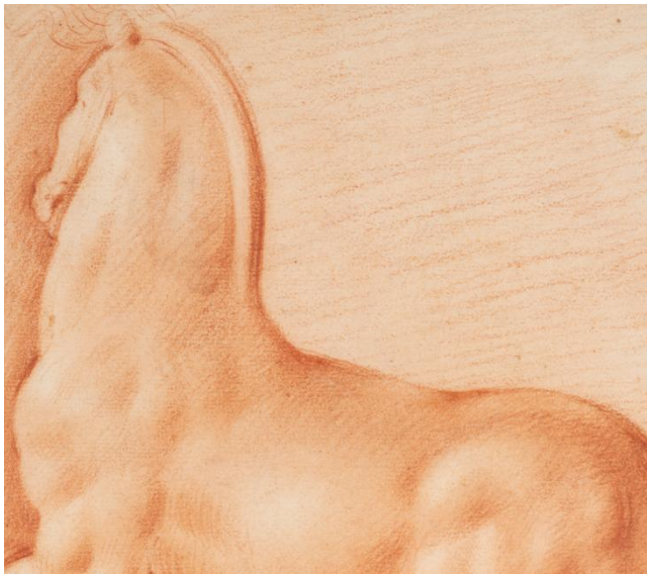


Figure 14. *Study for the Ideal Horse*
Private Collection

Among the drawings unjustly excluded from the Leonardian corpus is also a dog study *(figure 12)* preserved in the Royal Collection Trust, now attributed to Francesco Melzi, based on reasoning that is more speculative than demonstrative. Long recognized as a work by Leonardo, this study was reassigned by Kenneth Clark in 1935. Today, in view of the undeniable quality of this drawing, it has been re-evaluated as a faithful copy of an original by Leonardo. From then on, this justification became a way to preserve the plastic quality of the work while removing the author, without stylistic or documentary justification.

However, this hypothesis is more speculative than reasoned. For why would a student such as Melzi, known for his talent and intellectual closeness to Leonardo, have copied identically an unfinished anatomical study, an exercise with no artistic or pedagogical purpose? What logic would there be in pushing imitation to the point of reproducing the numbering « 122 » in Leonardo da Vinci's graphic style? It is unthinkable that Melzi would have reused a personal classification system employed by Leonardo himself in his notebooks, imitating his handwriting.

In the face of such contradictions, a re-evaluation is necessary, especially since this drawing exhibits several stylistic and technical features that align fully with Leonardo da Vinci's graphic practice. One observes a subtle handling of modeling, a perfectly mastered circulation of light, and an expressive tension in the line that is both analytical and alive. These elements are typical of his anatomical research, in which he strives to reveal muscular structure through the interplay of light and shadow.

This approach is found in several red chalk studies by Leonardo, notably in the figure of the standing nude man from behind *(figure 13)* or in studies for the ideal horse *(figure 14)*. In these examples, as in the dog study, hatching sets up an internal rhythm that supports the construction of volume and animates the form. This technique allows for modulation of flesh, emphasizes joint curves, and even, in some areas, extends movement beyond the visible contour, as if to capture the impulse or retain the tension of a still-suspended gesture. It is also observed that the direction of hatching can vary within the same drawing.

In the dog study, the hatching follows the orientation of the fur and the movement of the animal. It rises obliquely at the neck and changes direction on the abdomen, according to the volume and articulation of the body. In the horse study, the principle is the same but amplified by the animal's overall motion. The neck turned toward the right causes the hatching to tilt in that direction, while others, depending on the area of the body or muscular thrust, adopt a different direction, always in coherence with anatomical dynamics and the logic of modeling. In the study of the nude man from behind, hatching

is organized in crossed diagonals, from bottom right to top left, and vice versa, creating a controlled zigzag effect. This mesh allows for modulation of volumes by playing on line density. As with the dog and the horse, some areas are deliberately left blank to accentuate muscle relief through contrast, in a subtle interplay of light and shadow.

The case of the *Scapigliata* and of this dog study, like many others, invites reflection on the mechanisms employed in evaluating a work of art, for it is now clear that the judgment rendered is often conditioned by the name to which it is associated. If a work is attributed to a great master, it inspires enthusiasm and admiration. But as soon as the attribution is questioned, it becomes suddenly orphaned from its name and subject to microscopic reappraisal, awaiting justification for its fall. This reversal of appreciation, based on a mere shift in label, reveals the fragility of critique. The case of the Leda from Wilton House illustrates this perfectly. It is a phenomenon in which uncertain hypotheses, once integrated into scholarly discourse, gradually ascend to the status of truth through mere editorial repetition. In such a context, it becomes difficult to challenge established narratives without being seen as marginal or irreverent, for once a discourse takes hold, it tends to solidify, making any attempt at revision not only delicate but nearly unacceptable. It is no longer knowledge that evolves, but history that becomes frozen. Fortunately, scholars, through the rigor of their work, their methodological demands, and their sustained engagement with primary sources, help advance our understanding.

After this necessary detour concerning the later critical reception of the work, it is now appropriate to return to the historical context in which Leonardo da Vinci's painting may have entered the Arundel collection. At that time, between 1626 and 1628, Thomas Howard, Earl of Arundel, was in political disgrace at the English court[21]. Removed from affairs by King Charles I, he was placed under house arrest but retained significant autonomy in his private activities. Contrary to what one might suppose, this removal did not in any way deprive him of his networks or his capacity to operate within cultural and intellectual circles. Arundel continued to receive visitors, correspond with humanists, diplomats, and artists, and to acquire works of art with the same fervor as before.

Among the most eminent members of Arundel's circle was Sir Dudley Carleton, a high-ranking diplomat, who had served as ambassador successively in Venice and then in the United Provinces (1610–1625). Stationed in The Hague, near Antwerp, a true crossroads of the art trade, he maintained close ties with leading artists such as Rubens and gained access to networks of art dealers. His correspondence[23] reveals a deep interest in art and direct involvement in European collector networks. Close to the Earl and Countess of Arundel, with whom he travelled on several occasions, Sir Carleton facilitated the acquisition of major works, contributing to the expansion and prestige of their collection. Raised to the rank of Viscount Dorchester in 1628, he remained one of the most influential English diplomats of the early seventeenth century.

From 1626 to 1630, Carleton was appointed special ambassador to Louis XIII, King of France[24]. This status, distinct from that of a resident ambassador, granted him a specific mandate to personally represent the English sovereign on a high-level mission. This role gave him access to the highest echelons of political and aristocratic power, as well as to royal residences. Received in palaces and courts, he acted on behalf of the king and visited the centers of the French monarchy, notably the Château de Fontainebleau, rich in artistic collections since the Valois.

At that time, Fontainebleau[25] was a major artistic center, renowned throughout Europe for its masterpieces, particularly those by Leonardo da Vinci. The French royal collections, famous among humanist and diplomatic circles, were the subject of discussion throughout Europe. The Earl of Arundel, a major figure in the art world, could not have ignored them. Among the works was Leda and the Swan by Leonardo da Vinci, whose presence is attested by Cassiano dal Pozzo in 1625. Two years later, in 1627, a Leda considered to be by Leonardo appears in the Arundel collection. The convergence of these dates, combined with Carleton's presence in Paris in 1626, makes a discreet diplomatic mediation facilitating the transfer entirely plausible. Carleton had not only the necessary access to French circles but also a long-standing bond of trust with Arundel, making this role as intermediary perfectly

conceivable. It is moreover unlikely that Arundel, an astute collector, could have believed his Leda to be by Leonardo da Vinci while being aware of the existence in France of a painting of the same subject attributed to the same painter. This observation only strengthens the hypothesis that the Leda entering his collection in 1627 was precisely the one formerly kept at Fontainebleau.

The transfer of Leda into the Earl of Arundel's collection may be closely linked to a diplomatic episode in 1627, marked by a visit to England by Sir Dudley Carleton, then special ambassador to the court of France. Carleton attended an official audience at the court of Charles I, in the presence of Arundel[21]. That same year, the young German painter Joachim von Sandrart[26] arrived in London, accompanied by his master Gerard van Honthorst, a key figure in Northern Caravaggism. According to Sandrart's memoirs, their journey from France was facilitated by the direct intervention of Sir Carleton, then stationed in Paris. The German painter specified that upon his arrival, he was immediately placed under the protection of the earl of Arundel, who became one of his first patrons. He described in detail the earl of Arundel's gallery, mentioning the paintings he saw there. He specifically listed works by Hans Holbein, Raphael, Titian, Tintoretto, Veronese, and added Leonardo da Vinci to this list. These were not drawings but paintings, as the word "*Gemälde*" was unambiguously used in the description. To date, the only known painting by Leonardo that could have been in the Arundel collection at that time was Leda, whose presence is further confirmed by the drawing by Luca Vorsterman.

In 1631–1632, letters from Arthur Hopton, the English ambassador to the court of Spain, sent from Madrid, testify to his relationship with the Earl of Arundel. In several letters, he specified that he was negotiating on the latter's behalf for the acquisition of works, notably by Leonardo da Vinci. The ambassador was probably referring to the Codex Arundel[27], which the Earl acquired in Spain at that time, and which became one of the major manuscripts attributed to Leonardo. Added to this was the Codex Windsor, which, although now kept at Windsor Castle, also formed part of Arundel's collection. These acquisitions testify not only to the admiration Arundel had for Leonardo, but also to the sophistication and depth of his collector's vision. To be interested in collections of drawings, scientific notes, and technical records requires refined knowledge of artistic practices, an erudite curiosity, and a clear desire to understand the very mind of the Italian master. This kind of collection represents an enlightened form of collecting, seemingly guided by the desire to access the creative thinking of genius.

Within this context, regarding *Leda and the Swan*, formerly kept in the Arundel collection, it seems highly improbable that the earl, considered a reference model of European collecting, known for the rigor of his acquisitions and his sustained interest in Leonardo's work, could have mistaken a studio piece for an original painting. His investment in the study of Leonardo's codices, his engagement with scholarly circles, and the exceptional quality of his collection all point to a level of expertise incompatible with such a misjudgment. Added to this is the corroborating testimony of Joachim von Sandrart, artist, art historian and theorist, and of Luca Vorsterman, renowned engraver trained within Rubens' immediate circle, both of whom were fully capable of discerning a master's hand. Not only did they identify Leda as a work by Leonardo, but their profiles, grounded in direct knowledge of high-quality Italian and Flemish art, make any stylistic or qualitative confusion highly unlikely.

All the elements presented in the historical section of this study converge on the hypothesis that *Leda and the Swan*, once part of the Arundel collection and now held at Wilton House, is in fact the original work by Leonardo da Vinci. This hypothesis is considerably reinforced by the qualitative superiority of the painting compared to other versions.

4. The various versions of *Leda and the Swan*

During the Renaissance, when a single pictorial subject existed in several almost identical versions, it was in most cases a religious theme. This predominance is explained by the central role played by the Church, the major patron of the time, whose numerous commissions were intended to adorn chapels,

convents, or grand altarpieces. In this context, collaborations between artists or between masters and assistants were frequent, particularly for large format works[28].

Leonardo da Vinci's *Virgin of the Rocks* constitutes an emblematic example. Commissioned in 1483 by the Franciscans of the Confraternity of the Immaculate Conception for their chapel in San Francesco Grande in Milan, it gave rise to two known versions of the work, both associated with Leonardo. What we know for certain, thanks to the existence of a contractual dispute attested by a set of legal documents preserved in the State Archives of Milan, is that the first version, probably the one now in the Louvre, was created by Leonardo with the participation of Ambrogio de Predis and his brothers, since their names appear in a legal case initiated in 1506 to claim the outstanding balance, several years after the completion of the painting. These facts are documented notably in the scientific catalogue of the National Gallery dedicated to the London version[29].

Such collaborations were standard practice in large-scale religious projects. When the dimensions or pictorial ambition required it, the master would surround himself with assistants to prepare the support, execute certain details, or follow his cartoons. This was notably the case with Raphael[30] who, for the creation of the Vatican Rooms frescoes, employed his closest collaborators within a perfectly structured workshop logic, where the sacred image remained under the master's supervision while being the result of a controlled collective effort. This organization is attested by contemporary sources, notably by Giorgio Vasari in his *Vite de' più eccellenti pittori, scultori, e architettori* (*Lives of the Most Excellent Painters, Sculptors, and Architects*), where he describes in detail how Raphael conceived, distributed, and supervised the execution of his compositions.

But such a logic cannot be applied to a work like Leda[31], which is neither a sacred subject nor the result of a collective decorative program. It stems from a personal conception, a unique inspiration, long matured in the artist's mind, which makes any multi-handed intervention inconceivable. Inspired by classical mythology, imbued with scholarly eroticism, constructed idealism, and a meditation on metamorphosis, it escapes liturgical frameworks and workshop-based collaboration. Imagining Leonardo entrusting a student with the faithful reproduction of it makes little sense. Leda does not fall within a workshop practice where a single motif is multiplied by several hands to fulfil a commission. If versions exist, they can only be the result of individual initiatives by followers seduced by the power of the model, but external to its genesis.

Leonardo's influence was felt very early on, as soon as he left Milan in 1499. Many artists studied his works, drew inspiration from them, or imitated them[32]. He became an example to follow, a living reference, a model for generations to come. Each of them took up a part of his language in their own way, light, form, the ambiguity of the gaze, but never succeeded in equalling the master.

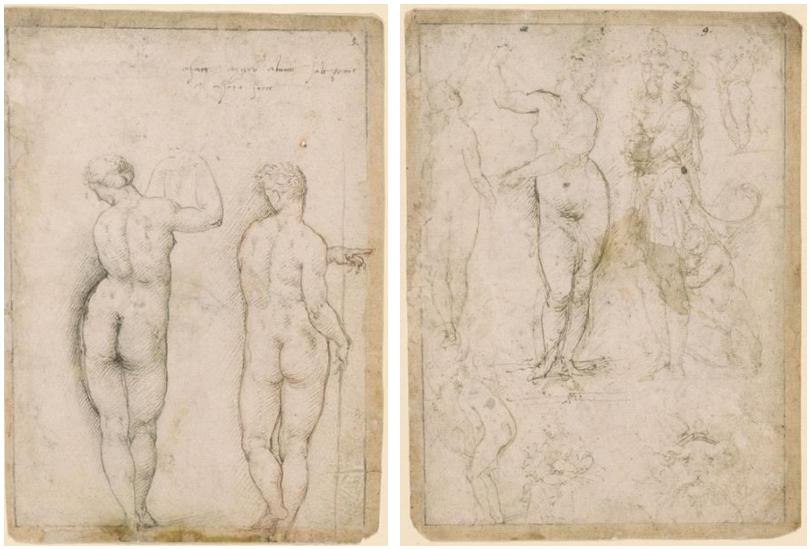
Among these followers was Cesare da Sesto. Giorgio Vasari, in his *Lives of the Most Excellent Painters, Sculptors, and Architects*, briefly mentions this man as one of the painters who followed Leonardo's manner. He notes his evident talent and specifically mentions his attraction to Northern landscapes, which Cesare may have discovered or developed during his stay in southern Italy. This remark, though brief, has been interpreted as a sign of an open outlook, nourished by various influences.

However, attributing works to Cesare da Sesto with certainty remains a difficult endeavour[33]. His corpus rests essentially on aesthetic groupings and not on documentary evidence. This is a constant limitation in the study of this artist who, though significant, remains partially elusive.

Figure 15. *The Baptism of Christ, vers 1510*
Cesare da Sesto
Gallarati Scotti Collection, Milano

There are, however, certain documented works that clearly reflect Cesare da Sesto's distinctive style, while also bearing witness to his roots in the Leonardesque tradition. Among these, The *Baptism of Christ* (figure 15), painted in Milan around 1510 in collaboration with the landscape painter Bernardino Bernazzano, is considered one of the pinnacles of his Lombard period, when Cesare truly asserted his artistic personality. While Bernazzano handled the landscape with its delicate mists and vegetal backgrounds, Cesare painted the figures with a personal approach.

The figures he presents are characterized by unusual proportions, with elongated torsos, sloping shoulders, and slightly undersized heads, introducing a subtle visual dissonance. It is precisely this singularity that shapes his style.



Figures 16. *Drawings by Cesare da Sesto*
Morgan Library

The same characteristic can be found in his drawings preserved at the Morgan Library[24], notably in the studies of female and male nudes, powerful figures but seemingly arrested in motion, often drawn with a supple yet hesitant line *(figures 16)*. Cesare adopted certain techniques from Leonardo, such as soft lighting, bodily torsion, and elegant gestures, but did not retain their precision or balance. In his

work, the line slips, the contours dissolve, the forms waver, as if the figure were resisting its own structure. It is this permanent tension between the Leonardesque model and a freer, more intuitive style of drawing that deeply defines his manner. A preparatory drawing for Leda is known that radically diverges from the aesthetic of the version preserved at Wilton House.

Among the older versions of Leda, one of the most notable is that which was exhibited in 1873 at the Corps législatif in France, from the collection of M. de La Rozière, before entering that of the baroness de Rublé[25]. This work corresponds today to the version preserved at the Uffizi Gallery in Florence *(figure 17)*.

Figure 17. *Uffizi Gallery*

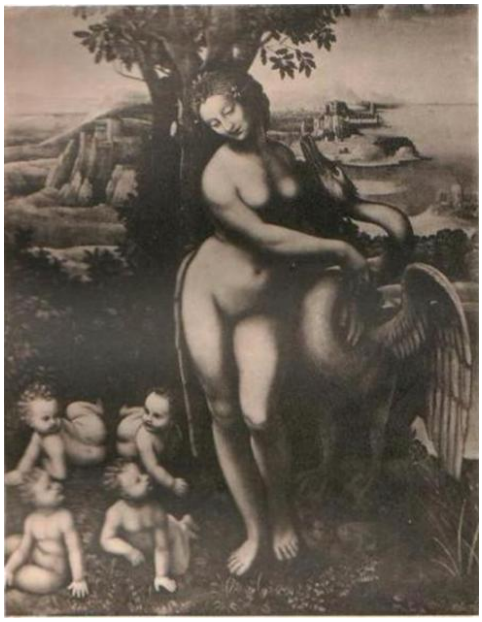


Figure 18. *Version once exhibited at the Grosvenor Club*

Figure 19. *Philadelphia Museum of Art John G. Johnson Collection, 1917, cat. 393*

Figure 20. *Villa Borghese*

Various versions of Leda and the Swan executed by disciples or followers of Leonardo da Vinci.

During the *"Mostra di Arte Italiana,"* held in London in 1898 by the Burlington Fine Arts Club[36], under the patronage of the Grosvenor Club, Italian Renaissance works from British private collections were exhibited. Some of these works were then described as *"after Leonardo"* or attributed to the *"School of Leonardo,"* and several replicas of Leda and the Swan were shown. One of these versions came from the collection of the Marquis of Hastings *(figure 18)*, then entered the Doetsch Collection, before being sold at Christie's in 1895. It was likely the new owner who lent the painting for the exhibition. Certain variations of Leda and the Swan remain particularly well-known today, such as those kept at the Philadelphia Museum of Art *(figure 19)* and the Galleria Borghese in Rome *(figure 20)*.

Although they may exhibit a certain quality of execution, these versions show a shift from Leonardo's visual language toward a more descriptive and ornamental approach. These works draw on a preexisting model, which they reproduce without understanding the internal logic that, in Leonardo's work, was based on a rigorously scientific observation of life, driven by a profound and structured thought. It is precisely this lack of singularity that causes them to drift toward decorativeness, where surface beauty substitutes the power of the gaze.

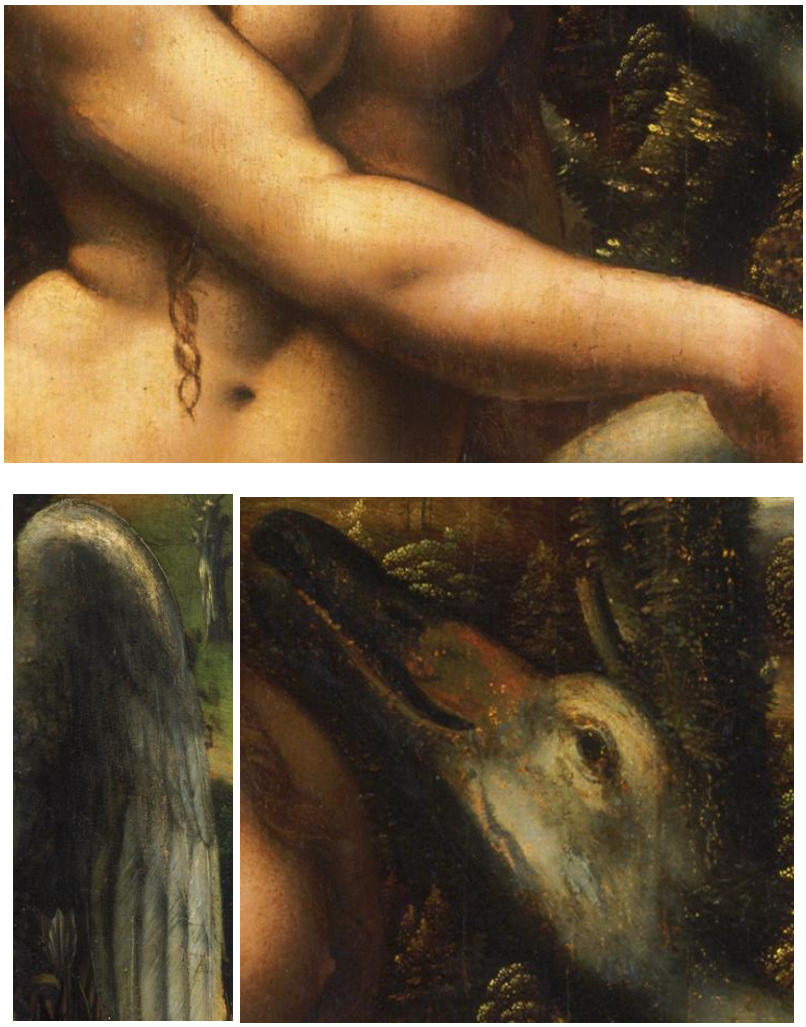
This tendency is especially evident in the version held at the Galleria degli Uffizi *(figures 17, 21)*, which reproduces the main lines of Leonardo's iconographic tradition, yet its apparent balance unravels upon closer inspection. Although Leda's body displays a refined execution, particularly in the treatment of curves and modeling, the work as a whole lacks cohesion.

Figures 21. *Leda and the Swan*
Uffizi Gallery

The swan appears frozen in a stiff and unbalanced posture, betraying a poor anatomical understanding. Its beak, slightly oversized, fits awkwardly into the curve of the skull, and the interior of the mouth strangely gives the illusion of teeth. The plumage, overly linear, is drawn insistently, but without breath. There is no sense of light variation, no vibration. Each feather seems mechanically executed, without genuine observation of life. As for the landscape, the whole appears juxtaposed, as if constructed by stacking, leaving the impression of an artificial backdrop, whereas Leonardo would have conjured a coherent world, bathed in air and light.

A similar dynamic is present in the version held at the Philadelphia Museum *(figures 19, 22)*, which borrows certain elements from the Leonardesque tradition, notably in Leda's posture and the arrangement of the children. But beyond these borrowings, the work suffers from a general imbalance and a pictorial treatment that reveals a secondary hand.

The composition, overly narrative, is weighed down by an accumulation of details, castles, mountains, dead trees, that flood the space and overwhelm the main subject. The architecture lacks coherence in its volumes, and a poorly handled perspective prevents any atmospheric unity, in stark contrast with Leonardo's subtle and deeply structured landscapes. The color palette also reveals an unsteady hand. The shadows are dull, the highlights overly forceful, and the light areas are overloaded with white, which disrupts the overall visual balance, causing the whole to lose optical coherence. This imbalance is particularly visible in the contours of Leda's body, marked by a lack of subtlety in the transitions between shadow and light.

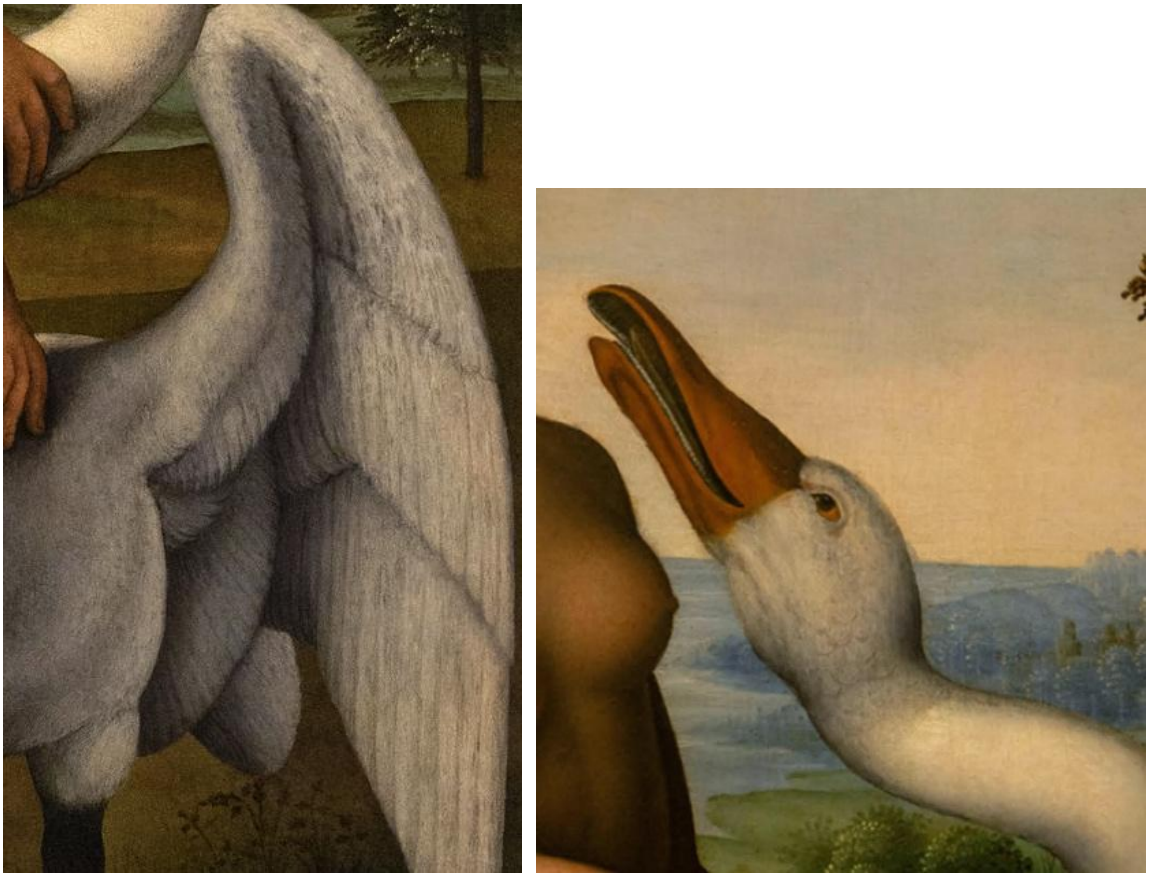


Figures 22. *Leda and the Swan*
Philadelphia Museum of Art
John G. Johnson Collection, 1917, cat. 393

The swan's anatomy alone concentrates numerous weaknesses of execution. It features a beak that is too long, a blank and lifeless gaze, and plumage rendered without transparency or modulation, all of which reveal technical shortcomings. Despite some commendable intentions in the treatment of Leda, the whole remains the work of a follower, diverging from the elegance of gesture and anatomical mastery that characterize an original by Leonardo.

In the version from the Villa Borghese *(figures 20, 23)*, this tendency toward a more ornamental creation, detached from the observation of life, becomes evident, expressed in a more poetic form, yet equally removed from the Leonardesque spirit.

The scene seems imbued with a dreamy softness. It features the major components of the theme, Leda nude, in an elegant posture, a swan, and children. Added to this are birds and a snail resting on a rock, which contribute to the construction of a dreamlike world. The background landscape enhances this strange, almost suspended atmosphere. Everything appears stylized, as if absorbed into an inner vision, with no firm grounding.



Figures 23. *Leda and the Swan*
Villa Borghese

However, this delicate atmosphere does not conceal certain flaws, particularly in the rendering of the swan. The wing is poorly constructed, lacking muscular logic or anatomical depth. The volumes are flat, the feathers drawn stiffly, without modulation or suppleness. The beak, too long, detaches awkwardly from the head, and the overall structure lacks tension and coherence. The animal does not seem to breathe; it floats within the image, devoid of strength or life.

In sum, this version presents a scene of vaporous charm but remains disconnected from true observation of life and from a consciously constructed spatial framework, both essential to Leonardo.

5. Stylistic Analysis of the Wilton House Version

5.1. *The Pictorial Element*

The version preserved at Wilton House[37] stands out clearly for the exceptional quality of its execution and the subtlety of its modelling and light (figure 24). It surpasses all other known interpretations and appears to embody several of the highest principles of Leonardo da Vinci’s art.

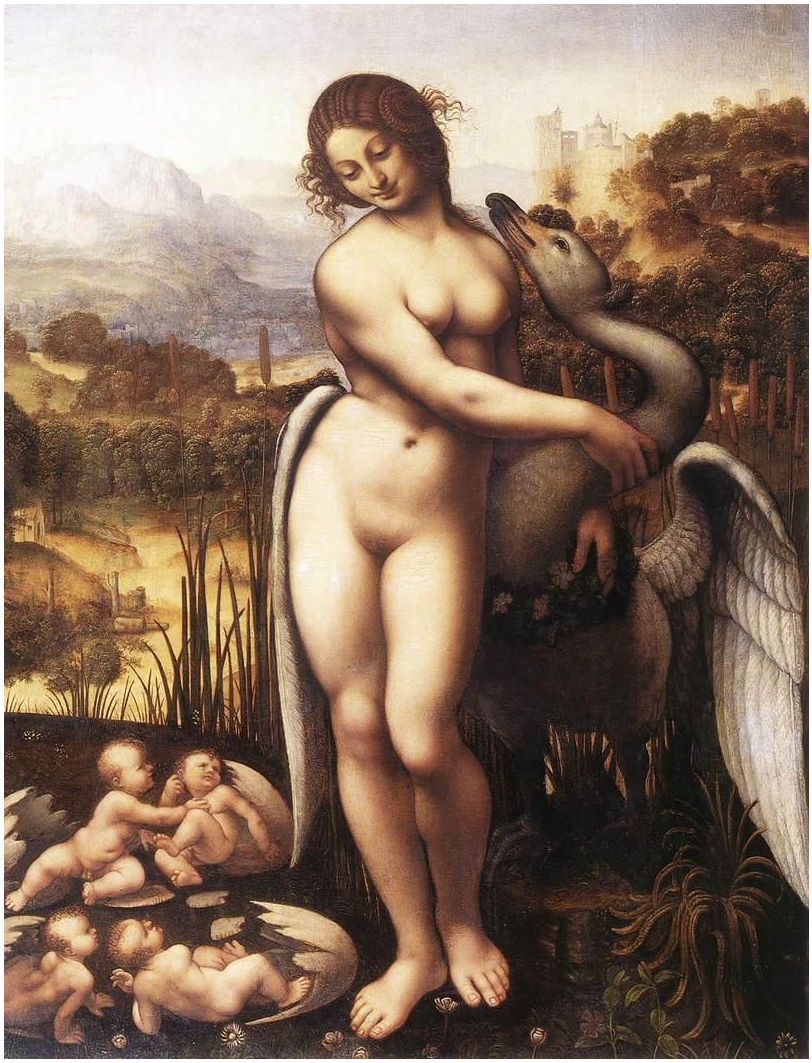


Figure 24. *Leda and the Swan*
Wilton House Trust
Collection of the Earl of Pembroke

The pictorial execution of the work reaches an exceptional degree of finesse. The surface, meticulously built up through successive glazes, shimmers in the most delicate transitions between light and shadow, where the material seems to dissolve into a diaphanous skin that blends into the air. This treatment of the contour, never harsh, never fixed, gives the flesh a breathing presence, and it is in this subtle modulation between illuminated areas and those fading into shadow that one of the deepest dimensions of Leonardo's realism is expressed.

In the *Treatise on Painting*[38], Leonardo da Vinci devotes several paragraphs to the balance and movement of the human body, particularly in the depiction of the nude. On page 154 of the Delagrave edition (1910), he advises: *"When you draw nudes, do so completely; then you will finish the best limb and apply it to the others: otherwise, you will not get used to connecting the limbs together."* And further on: *"Avoid turning the head in the same direction as the chest and moving the arm like the leg. […] If you make the chest protrude with the head turned to the left, the parts on the right side should be higher."* These instructions aim to ensure rhythmic dissociation of the body's axes, a key to visual balance and expressive grace. In the Leda and the Swan at Wilton House, the painter rigorously applies these principles. Leda's head is turned to the left while her hips tilt in the opposite direction, and the movements of the arm and leg do not mirror each other symmetrically, avoiding all rigidity.

In this work, light sculpts and animates the forms by embracing the body's volumes with remarkable anatomical accuracy. The curve of the knee, the torsion of the legs, the inflection of the pelvis, the

pronounced tension of the neck, each detail contributes to a global, fluid movement that seems to continue before our eyes, as if the body were slowly turning in space.

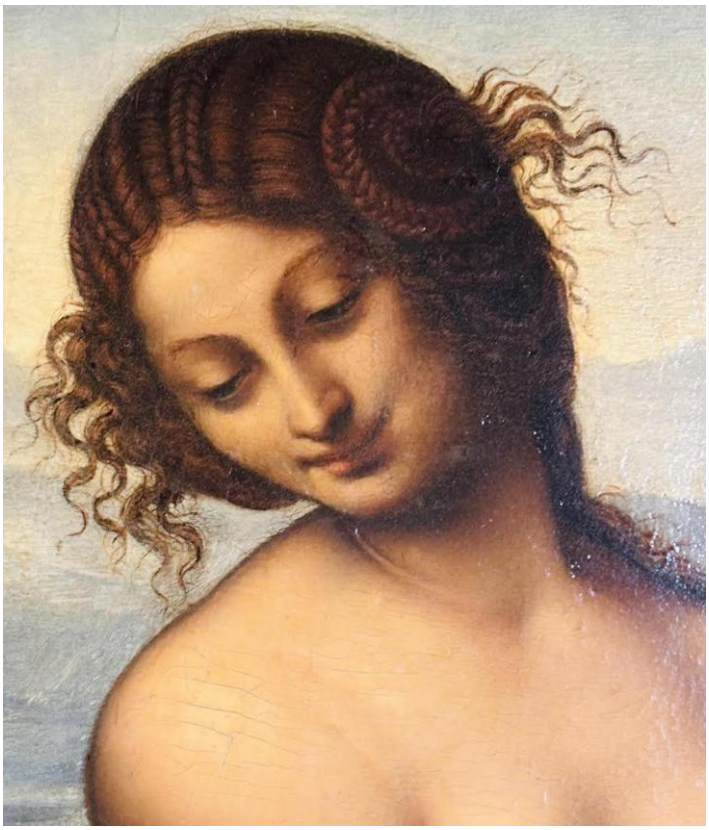


Figure 25. *Leda and the Swan*
Wilton House Trust
Collection of the earl of Pembroke

The hair *(figure 25)*, of great sophistication, follows a rigorous internal logic, structured around geometric spirals reminiscent of Leonardo's studies on flows, vortices, and natural forms[39]. Certain strands detach themselves fluidly, as if responding to the variations of an invisible current, seeming to bend under the effect of an imperceptible airflow. This imparts a light and vibrant dynamism to the whole, where the material appears literally traversed by the atmosphere.

From this dynamic emerges the figure of Leda, as if literally arising from the very atmosphere that envelops her, so thoroughly is her construction governed by the laws of light and space. To preserve the clarity and structure of this form, the painter emphasizes the contours of the figure in certain parts of the body *(figure 26).* This approach adheres to an explicit rule formulated by Leonardo in his *Treatise on Painting*[38], on page 114: *"An important part of painting is the background, against which the outline of natural bodies […] is revealed, even if the color of the bodies is identical to the background. This is because the convex edges of bodies are not illuminated in the same way […] such contours being either lighter or darker than the field."* Leonardo emphasizes that it is light contrast, not simply color difference, that makes form visible in space.

This is precisely what is observed in the painting at Wilton House, where the contours are reinforced to compensate for the lack of chromatic contrast, thus ensuring a clear reading of the volumes and a modeling faithful to Leonardo's principles. The same treatment can be found in the rendering of the naked child's body in *The Virgin and Child with Saint Anne* by Leonardo, where the contours appear clearly defined *(figure 27)*.

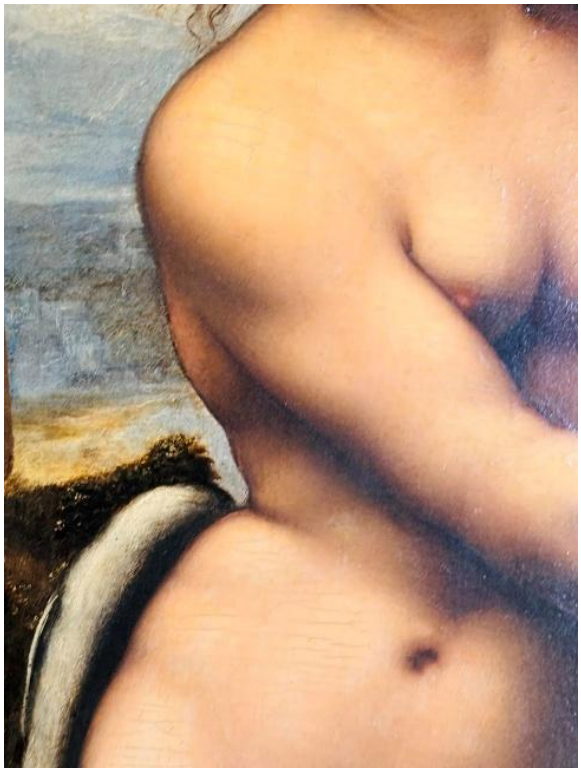


Figure 26. *Leda and the Swan*
Wilton House Trust
Collection of earl of Pembroke

Figure 27. *Saint Anna, Virgin and child*
Leonardo da Vinci
Louvre

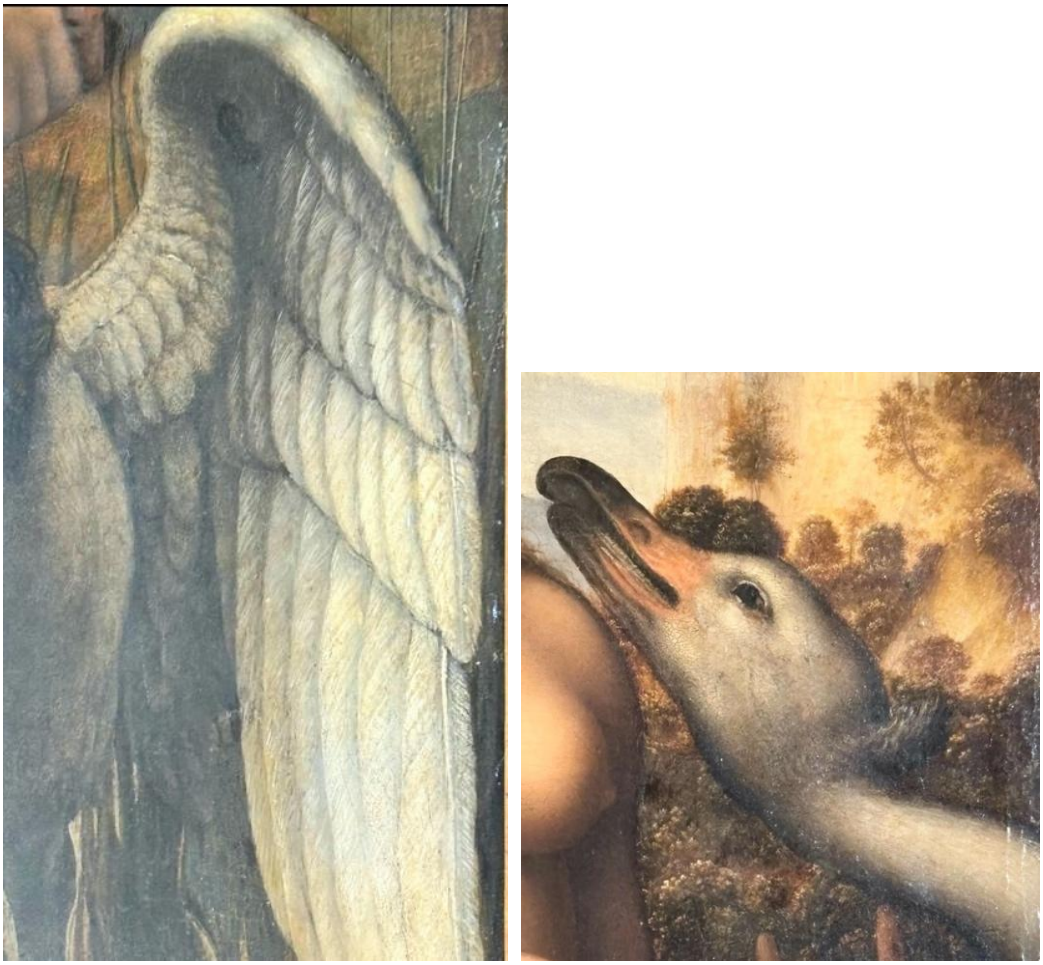
In this Leda, the volumes breathe in the light. The forms modulate according to their exposure, and each area of the body subtly engages with the atmosphere that permeates it. The luminous body unfolds against a background divided between the brightness of the sky and the shadow of the landscape. Thus, in the darker zones, the technique of sfumato[40] (blurring of contours) is employed with restraint, allowing the forms to dissolve gradually. In the lighter zones, by contrast, the contours are accentuated to preserve clarity. Everything then relies on a highly complex technique, in which each tonal transition must be calibrated so that Leda's body may inhabit the space without detaching from it and live within the light without dissolving into it. It is in this precise balance that the figure's vibrant, almost animated presence arises, endowing her with both density and grace.

It is this science of the living that distinguishes Leonardo from all his contemporaries. None reached such a degree of fusion between matter and breath, except for Raphael Sanzio, who was in Florence at the time of the master's most advanced investigations. He accessed this sensitive understanding of reality, absorbed it, and succeeded, within some of his figures, in expressing that ideal beauty which Leonardo sought. It was during this period that the young prodigy broke away from the style of Perugino to embrace a new painting shaped by Leonardo's art.

Figure 28. *Mary Magdalene*
Raphael Sanzio
Private Collection

It was probably within this same momentum that Raphael painted a magnificent portrait of Saint Mary Magdalene (Figure 28), recently rediscovered in England after having long remained forgotten. The work, of rare intensity, demonstrates a fineness of line and a modelling of light characteristic of Raphael. In this portrait inspired by Leonardo da Vinci, the young prodigy managed to go beyond mere imitation of reality to express a true inner presence. This conception of beauty, which transcends appearance to touch upon essence, was deeply rooted in the Florentine thought of his time. Neoplatonism[41,42], the philosophical current of the Italian Renaissance, taught that ideal beauty reflects the divine, manifested beyond sensory appearances to reveal an inner truth. It was within this intellectual climate that Leonardo developed his vision of art, where the visible became a gateway to the invisible, and a path to perfection. Leonardo understood this better than anyone. He once wrote in a notebook: *"The beauty of the face is only perfect when the soul illuminates the gaze."*

This portrait of Mary Magdalene, like so many others found on British soil, bears witness to the gradual exile of numerous Italian originals into the great English collections, while copies remained on the peninsula. This scenario recalls that of the famous portrait of Pope Julius II, whose original is now kept at the National Gallery in London, while the copy remains at the Uffizi Gallery in Florence. Until recently, it was not even known that Raphael had painted a portrait of the Saint. Yet, the work appeared in the inventory of the Duke of Urbino, Francesco Maria II, until 1631. This rediscovery, the subject of a recent scholarly publication in the journal Arts et Sciences[43] entitled *Saint Mary Magdalene: Rediscovery of a Forgotten Masterpiece by Raphael Sanzio*, is a reminder of how England still harbors, sometimes in the shadows, unsuspected treasures lost within the folds of History.



Figures 29. *Leda and the Swan*
Wilton House Trust
Collection of earl of Pembroke

In the Leda and the Swan at Wilton House, this pursuit of life[44] extends to the entire composition. *Leda and the Swan* testifies not only to the artist's technical mastery, but also to his relationship with living nature, to his observation of reality, and to his anatomical knowledge[45]. The swan here escapes the frozen models found in other versions. The feathers are rendered with such meticulousness that their texture becomes almost tangible. Each feather is depicted with rigorous hierarchy, covert feathers, remiges, secondary and primary feathers are articulated into a fluid whole. The shoulder joint is rendered with rare anatomical refinement, whereas other versions, such as the one at the Uffizi, expose a bare muscle that feathers should naturally cover. The neck unfolds in a supple and controlled curve, perfectly conforming to the bird's morphology. The proportion of the beak, well-matched to that of the head, demonstrates remarkable attention to actual measurements. This obsession with detail extends to the inside of the mouth, showing a keratinous plate typical of swans. This level of precision, giving the animal a living presence, could only result from direct observation of life, guided by scientific rigor and an exceptionally sharp visual memory.

In this work, the mountainous and architectural background responds with precision to the principles Leonardo da Vinci outlines in his *Treatise on Painting*[38]. On page 94, in paragraphs 214 to 216, he refers to a fundamental optical phenomenon: *"the greater the distance, the more confused objects appear because of the amount of air between them and the eye, and this air imparts its own color to those objects, thereby diminishing their appearance."* In other words, the farther an object is, the more the air between it and the eye softens its contours, alters its colors, and weakens its presence. Air acts as a filter, giving distant forms a distinct tint, often bluish, and a softer appearance. Some have referred to this optical effect as *non finito*, as if the work were unfinished. But this interpretation is mistaken. This vaporous blur results from a scientific gaze, attentive to how the eye truly perceives. As distance increases,

contrasts diminish, contours dissolve, and colors blend into the atmosphere. It reflects the logic of vision: the closer the element, the sharper it is. The farther, the more it fades. Leonardo thus adheres to this progressive dissolution of the world.

This theory of atmospheric perspective is translated with great accuracy in the Wilton painting. On the left, the mountains dissolve into pale bluish hues, almost unreal. On the right, the structures on the heights gradually lose their definition, as if absorbed by diffuse light. The entire landscape is structured by this gradation, following the logic of air thickness, ambient light, and our perceptual process.

This approach is extended by another passage in the Treatise[38], on page 231, paragraph 727, where Leonardo specifies that the farthest mountains should appear in a purer blue, while thick forests, especially in high altitudes, should be rendered in darker tones. Once again, the Wilton House painting faithfully follows this rule. On the right, the forest masses grow denser and darker as they ascend, while to the left, the farthest peaks fade into soft mist.

For Leonardo da Vinci, the landscape is a living system in perpetual transformation. Unlike his contemporaries, who reused generic backgrounds or standardized decorative elements, Leonardo never repeated the same mountain chains, hill forms, or vegetation. Each painting corresponds to a specific study, to renewed inquiry, and to a reconstruction grounded in scientific analysis of natural phenomena[46]. His observation of nature aimed at understanding causes such as erosion, gravity, precipitation, water flow, condensation, and geological forces.

This scientific perspective is expressed in the diversity of mountainous structures represented in his painted work. In *The Virgin of the Rocks*, the steep, cavernous cliffs recall karst landscapes shaped by chemical erosion and subterranean collapse, Dolomitic-type settings likely inspired by formations visible in parts of the Lombard Pre-Alps. Conversely, the painting Saint Anne, the Virgin and the Child features pointed summits that echo the Apennine ridges seen from Tuscany, around the Upper Arno Valley or toward the Tuscan-Emilian Apennines.

In *Leda and the Swan*, the mountains become more undulating, stratified, almost sedimentary, as if shaped by long processes of wind and water erosion. There is a likely influence of the hills near Florence, such as those of the Mugello, but with a stylization reminiscent of the rolling reliefs of central Tuscany. However, the background also presents escarped forms that could evoke the Apuan Alps, located in the northwest of Tuscany, between Pietrasanta, Carrara, and the Tyrrhenian Sea. These mountains, known for their limestone ridges and their high-quality white marble, constituted a clearly identified territory for Renaissance artists. In 1517, Michelangelo traveled there by order of Pope Leo X, a Medici, to personally choose the marble blocks intended for the façade, never built, of San Lorenzo in Florence. The region of Pietrasanta then became a major center for sculpture, frequented by artists, craftsmen, and engineers.

Leonardo da Vinci probably observed these mountains during his travels and topographical studies, in connection with his research on geology, land formations, and hydraulic engineering. In several of his notebooks, he recorded observations of limestone terrains, rock layers, strata, and the undulating features typical of Tuscany's most rugged landscapes. He notably remarked that 'the white marble extracted from the mountains is similar to ivory,' highlighting his interest in the physical and visual qualities of this stone.

Figure 30. *Pen drawing, brown ink, and black chalk wash*
View of the Arno, 1473
Leonardo da Vinci
Uffizi Gallery

The drawing shown above has been horizontally flipped for comparative purposes, to reveal similarities with the landscape in the following figure.

Figure 31. *Leda and the Swan*
Wilton House Trust
Collection of Earl of Pembroke

But in his painted landscapes, Leonardo does not faithfully reproduce what he sees. He blends elements drawn from direct observation with others, more distant, integrated into his visual memory. The background of the painting Leda and the Swan thus appears to result from a combination of the gentle hills of the Arno Valley, which he had explored extensively, and mountains inspired by the Apuan Alps, in the northwest of Tuscany.

Given that this mythological scene was likely painted in Florence, it is plausible that Leonardo used what he knew best. The landscape of his first drawing dated August 5, 1473, which depicts the Arno Valley (figure 30), bears strong visual and topographical similarities with that of the Wilton House painting (figure 31).

Between 1503 and 1508, the probable period of Leda's conception, Leonardo da Vinci conducted, in parallel with his artistic research, several large-scale technical missions. He was notably commissioned by the Florentine authorities to study the hydraulic development of the Arno Valley[47]. On that occasion, he created several detailed topographical maps of the region between Florence, Empoli, and Vinci, in connection with river diversion projects or canal openings to the sea. These works are documented in

the Codex Leicester, where he analyzed erosion mechanisms, river movements, and valley formations. In Manuscript F, he even directly described the Tuscan reliefs and traces of their marine origin. These documents attest to an empirical knowledge of the terrain, acquired through close observation, on the very site of his youth.

Figure 32. *Study of trees*
Leonardo da Vinci
Royal Collection Trust, RCIN 912431

Figure 33. *Leda and the Swan*
Wilton House Trust
Collection of earl of Pembroke

Leonardo proceeded in the same way with the vegetation. He adapted the species represented to the nature of the terrain, the soil's humidity, and the atmospheric exposure. In the English version of *Leda and the Swan*, the botanical richness is exceptional. Several species of trees are arranged in compact groups, reminiscent of his studies of trees such as the one kept at Windsor *(figure 32)*. The lush vegetation in the Wilton House painting closely corresponds to the characteristic flora of Tuscany, known for its particularly dense plant life. Cypresses, oaks, pines, olive trees, ash trees, elms, and even willows lining the riverbanks form a living repertoire that Leonardo knew intimately.

One of Leonardo's studies depicts a cluster of trees in which certain branches bend under their own weight. Leonardo captures life in its most organic and unstable form. This fidelity to reality continues in the Wilton painting, where some leaning trees retain this structural truth of an observed nature that contributes to the construction of a living world *(figure 33)*. Whereas copyists and followers are content with reproducing a style and pleasing the eye through artifices, Leonardo observes, understands, and renders what is most subtle in the real. It is in these details that one senses the hand of a genius composing with the accuracy of truth.

On page 235 of his Treatise on Painting[38], in paragraphs 746 to 748, Leonardo da Vinci explored the subtle effects of light on foliage. He observed that even when leaves belong to the same species, they never look exactly alike. He wrote: *"Nature is so inventive and fertile in variation that among trees of the same species, not one is identical to another."* This statement expresses how what the eye perceives constantly varies depending on the light, the orientation, the arrangement of the leaves, or their exposure to the sky. In his treatise, Leonardo emphasizes this complexity inherent to visual perception, reminding us that painting a tree is not about freezing its shape into a uniform mass, but about rendering its true diversity as it manifests through variations in light and surface.

This lesson is clearly implemented in the Wilton House version. Within the tree groups, a subtle opposition emerges between the treetops and their bases. The upper parts, exposed to the sky, capture a golden, warm, almost translucent light, while the lower zones gradually darken, as if the light struggles to penetrate. These effects demonstrate that the painter is not copying a model but applying a rigorous understanding of light phenomena and perception, exactly in line with the principles set forth by Leonardo.

Figure 34. *Leda and the Swan*
Wilton House Trust
Collection of earl of Pembroke

What strikes the viewer in this landscape, once the eye delves into its details, is the extraordinary vitality that animates it. Everything seems to breathe, grow, quiver under the light. The trees exist through their own density, their orientation, their open foliage, their unique way of capturing the light. The painter composes with light, humidity, and the density of the air, adjusting greens, browns, or warm tones to the very breath of the landscape. And thus, in certain places, he succeeds, through a few luminous, almost brushed touches, in making emerge the delicate vibration of light on the treetops *(figure 34)*.

In this vegetation, every element, down to the most distant plant masses, is rendered with sustained attention. It is this respect for reality that has allowed a coherent ecosystem to emerge, embedded within a living and structured overall logic. Thus, this landscape bears the trace of a watchful, rigorous gaze, one deeply attuned to reality, shaped by science, guided by discipline, and inhabited by an intimate knowledge of life.

Figure 35. *Study of reeds*
Leonardo da Vinci
Royal Collection Trust
RCIN 912516

Figure 36. *Study of flowers*
Leonardo da Vinci
Gallerie dell'Accademia de Venezia
Inv 237

Among the identified species, some echo Leonardo's botanical studies. The Ornithogalum umbellatum, a bulbous plant that grows in cool and humid areas such as stream banks, is here used to

soften the contours of the rocky promontory on which the swan stands[48]. The reeds *(figure 35)* and other hydrophilic plants are judiciously placed near the water, while species adapted to drier soils occupy areas farther from the moisture. In the foreground, small flowers appear, probably floral buds observed in the Tuscan countryside. These are the same as those in his botanical studies *(figure 36)*, drawn with the precision of a naturalist. These delicate, barely opened buds testify to a careful observation of living things, a deep understanding of nature, and demonstrate the application of the botanical principles Leonardo recorded in his notebooks[49]. The landscape in the Wilton House version can therefore only be based on empirical observation, bearing witness to a profound understanding of natural laws.

5.2. *The Support*

At the Renaissance, artists most often worked on wooden panels. Some works, of small or medium size, could be executed on a single wooden plank, especially in poplar. This species was the most used in Northern Italy, due to its availability, relative lightness, and stability once properly prepared. This is the case of Leonardo's *Mona Lisa*, painted on a poplar panel 53 cm wide. However, large-format works were typically composed of several planks. As explained by Luca Uzielli, a specialist in ancient woodworking techniques for painting, since wood is a living material that reacts to humidity changes, the most reliable method at the time consisted of assembling narrow planks, carefully selected, oriented in the same grain direction, and joined in such a way as to distribute tensions. This know-how was deeply rooted in workshop practices[50,51]. Technically, it would have been possible to extract a wide board from a tree trunk, but such a choice would expose the support to major internal tensions from the drying process, carried out after the tree was cut.

During this phase, in which the wood gradually loses its humidity, it begins to shrink unevenly between the heartwood and the surface, generating mechanical constraints. This phenomenon is common to all planks, regardless of size, but becomes especially problematic in large formats. The wider the surface, the more internal stresses accumulate, increasing the risks of warping, bending, or cracking. Even before being painted, a large panel would already pose a high risk of deformation, making its use technically unviable.

In the long term, even the best-made wooden assemblies could suffer from shrinkage and expansion. To remedy this, from the 17th century onwards, interventions were practiced consolidating altered panels. Natural splits in the wood and separations between planks were filled using flexible materials, notably a mixture of animal glue and sawdust. Other interventions used black pitch, a paste made of melted resins, often extracted from resinous woods, sometimes mixed with wax or other fatty substances, used to coat the back of the panel. Once dry, the filler was carefully sanded to smooth the surface. In some cases, a dark paint, almost black, was then applied to the entire back of the panel, either for aesthetic purposes or to mask signs of intervention. This treatment could give the reverse a smooth and uniform appearance but masked the original composition, hiding joint lines and surface irregularities under a continuous visual surface. To this were often added wooden crossbars, nailed or glued to the back, intended to reinforce the panel and limit its movements. These were generally placed perpendicular to the wood grain, following a traditional conservation technique aimed at countering deformation caused by hygrometric variations. Since wood naturally tends to expand or contract in the direction opposite its fibers, these crossbars played a stabilizing role. Thus, if the planks are placed vertically, the crossbars are then positioned horizontally to counter the wood's natural movement across its width.

From the late 18th century onwards, for many Renaissance works, a second panel was fixed to the original one, which had first been thinned to a few millimeters to allow the operation. On this added panel, wooden crossbars were then fixed, forming a network intended to stabilize the whole.

As for the support used by Leonardo da Vinci to paint Leda and the Swan, Cassiano dal Pozzo described it as consisting of three planks disjointed along the length. However, this information cannot be taken literally, since when Leda was seen at Fontainebleau, it was hanging. His observation, limited

to the painted face, could just as well result from a visual impression or a comment made during the visit itself.

It becomes more difficult to fully trust this when, in that same description, he states that Leda is "almost completely nude," while Giovanni Paolo Lomazzo, in his Trattato della pittura, scoltura et architettura published in 1583, states that Leonardo's Leda is *"…entirely nude, embracing the swan, her eyes timidly lowered."* This simple discrepancy could be enough to mislead and reveals how ancient descriptions can also prove deceptive. It is possible that Dal Pozzo used this formulation due to the swan's wing movement, which spreads across Leda's left flank. His choice of words likely betrays a form of implicit modesty, consistent with the visual customs of his time. Thus, although his testimony is a valuable source, it cannot be considered a strictly objective material description.

To know with certainty the composition of a painted panel, visual observation is not always sufficient. One can of course examine the work once it is unframed, which may sometimes reveal edges, glue lines, or potential surface irregularities. But it is especially through scientific analysis methods, particularly radiography, that the internal structure of the support can be accessed.

To date, no thorough technical examination seems to have been conducted on the Wilton House painting. Despite the work's expressive power, it has not escaped the wear of time. Restoration interventions, sometimes necessary, have nevertheless left their marks. In this painting, the restoration manifests itself not only through visible retouching to the naked eye but also in the very structure of the support.

Today, as was the case for Leonardo da Vinci's *Saint Anne, the Virgin and the Child*[52], a thick varnish, yellowed over time, covers the surface, dulling the finest nuances, veiling the subtlety of the glazes, and blurring the clarity of certain details. A simple cleaning would likely allow the light to regain its fluidity, the flesh tones to vibrate again, and the space to recover its depth. One can easily imagine what the work, freed from this veil, could still reveal, so much does its current force suggest the intact intensity of what was once painted.

6. The Stages of Creation: Drawings and the Genesis of the Work

The cycle of studies that Leonardo da Vinci devoted to the theme of Leda constitutes one of the most fascinating examples of his creative process[51]. It reveals a path both complex and remarkably coherent, ranging from the earliest sketches to the most accomplished sheets. Each drawing attests to a rigorous approach in which Leonardo refines, modifies, simplifies, retaining certain elements, discarding others. This corpus forms a true graphic laboratory, grounded in the observation of the living world, where he gradually constructs the essential components of his final composition.

The examination of preparatory drawings shows just how structured the process truly was, nourished by a proliferation of hypotheses. Leonardo developed multiple aspects of the composition simultaneously, Leda's posture, the placement of the children, the morphology of the swan, the hairstyle, the surrounding vegetation, and the choice of model. No drawing repeats another; each explores a new variation, a fresh solution.

The media themselves vary according to the focus of the study: black chalk to capture momentum or shape volumes; red chalk to explore light on flesh; ink for more immediate, energetic lines. The technical choice always serves the intention of the moment, without adhering to a rigid method.

This method, both rigorous and intuitive, is also evident in his research for the equestrian sculpture commissioned by Ludovico Sforza. There, too, Leonardo multiplied his studies of horses, changing materials and tools in search of an ideal form, alive and perfectly constructed[53].

Among all known versions of *Leda and the Swan*, the one preserved at Wilton House stands out, both for its stylistic quality and technical mastery, as the culmination of this exploration.

Leonardo da Vinci's preparatory drawings for Leda and the Swan show that he initially focused on the posture of Leda's figure. Three sheets testify to an in-depth exploration of the kneeling position, with one knee resting on the ground. One of these is housed at Chatsworth House *(figure 37)*. Leda is shown there with the swan and four children, in a more complete arrangement. A second drawing *(figure 38)*, preserved at the Boijmans Van Beuningen Museum, introduces a variation in the composition by adding reeds in the background. Each study presents a different arrangement, revealing an ongoing exploration in which nothing has yet been fixed.

Studies of Leda and the Swan by Leonardo da Vinci

Figure 37. *Chatsworth House*

Figure 38. *Boijmans Van Beuningen Museum*

Leonardo did not retain the kneeling posture for the painted version. In the final work, Leda is depicted standing, in a twisted pose. This change is evidenced by a barely sketched drawing preserved at Windsor *(figure 39)*. And this fact raises questions, as it seems improbable that an artist as methodical as Leonardo could have finalized such an important composition without having studied every detail.

Figure 39. *Study of Leda*
Leonardo da Vinci
Royal Collection Trust (RCIN 970129)

It therefore seems entirely plausible that Leonardo also produced several studies for the standing posture, as he had done for the kneeling version. We know how extensively he multiplied his drawings to test his ideas, and how every element was the subject of deep reflection. The absence of preparatory studies corresponding to this posture can thus only be explained by the loss of certain sheets, or by misattributions that may have dispersed these studies outside Leonardo's recognized corpus.

From the earliest preparatory drawings, Salaì was used as the model for the figure of Leda. Whether in the Chatsworth study *(figure 37),* or in the drawing from the Castello Sforzesco *(figure 6),* the same ambiguous softness is evident in the modelling of the face. Many of the Tuscan master's drawings attest to the frequent use of this model. This choice was most likely due to the young man's great beauty, clearly perceptible in the *Saint John the Baptist* of the Louvre, where a singular blend of sensuality and innocence emerges. Giorgio Vasari himself wrote in his *Lives of the Most Excellent Painters* that Salaì, or Gian Giacomo Caprotti, was *"vaghissimo di grazia e di bellezza, avendo begli capelli ricci ed inanellati, de' quali Lionardo si dilettò molto"*, translated as *"very charming in grace and beauty, with beautiful curly and ringed hair, which Leonardo greatly delighted in."* His beauty, which naturally dismantled the rigid frameworks of both femininity and masculinity, offered the master an ideal embodiment of his aesthetic. Through it, Leonardo succeeded in bringing forth a figure both free and fluid, where the mystery of life itself became the very substance of creation.

Figure 40. *Study of Leda*
Museum del Sannio, Benvenuto

Figure 41. *Study of Leda*
Leonardo da Vinci
Royal Collection Trust (RCIN 912337)

A drawing preserved at the Museo del Sannio in Benevento, Italy, deserves particular attention in this regard *(figure 40)*. This sheet, executed in ink and charcoal, depicts Leda standing, surrounded by her four newly hatched children, next to a swan nestled on a vegetation-covered rock, in a setting of reeds. It was first analyzed by the historian Valerio Mariani (1899–1971), who already praised its remarkable quality while regretting that it has remained largely overlooked in modern scholarship. Yet this drawing shares several striking technical and stylistic similarities with other studies by Leonardo, notably with the Windsor sheet. Even though the latter is more sketch-like, the comparison reveals a consistent graphic language *(figure 41)*.

In both figures, the contours are fluid, precise, never rigid. They subtly thicken in certain areas to suggest volume or articulation, then lighten immediately, as if allowing the light to take over where the line recedes. The rendering of the muscular modelling, especially at the shoulder, is composed of small, successive inflections that embrace the anatomical volumes without ever constraining them. Even when working rapidly, in still-developing sketches, Leonardo remains absorbed by detail. He projects an idea, captures it with a swift gesture, but certain strokes inadvertently betray the intensity of his gaze.

When closely examining both drawings, one observes a similar treatment of the eyes and mouth. In each, softly placed shadows are enough to evoke a gaze, to suggest slightly parted lips. Anatomically, the two figures are nearly identical. Everything suggests that the model used was Salaì. The body is masculine yet softened in its contours to appear feminine. Among the more striking details of the Museo del Sannio drawing, the hair stands out. It is not yet elaborated, as the drawing seems to have served primarily to organize the composition rather than to refine each element. One can easily imagine that Salaì, who wore his hair long and curly, had it tied back for the occasion. Leonardo, faithful to what he saw, rendered it without attempting to idealize. In the Museo del Sannio drawing, two strands escape and lift gently into the air. He draws them. And it is perhaps here, in this seemingly insignificant gesture, that the most intimate trace of the master's hand is revealed. This detail, almost imperceptible, serves neither the narrative nor the composition. It simply conveys life. It bears the imprint of the wind, that fleeting breath only a truly attentive eye can capture. It is in this precision of the perceptible, this attention to the nearly imperceptible, that one recognizes the most discreet, and yet most certain, handwriting of the master. Indeed, this moment, observed and captured on the spot, likely motivated the decision to preserve, in the Wilton House painting, those same two light strands that still escape, despite the now-sophisticated hairstyle. A silent reminder of a moment of pure observation, left intact at the heart of the finished composition.

Furthermore, the Museo del Sannio drawing stands out in the way it brings together many elements present in the version kept at Wilton House. Everything here suggests an advanced preparatory stage, where space, gestures, and figures are still held in tension but already resolved within an overarching logic. For these reasons, this drawing deserves renewed consideration, as all signs suggest it may represent a foundational milestone, perhaps the closest visual testimony to the genesis of the project.

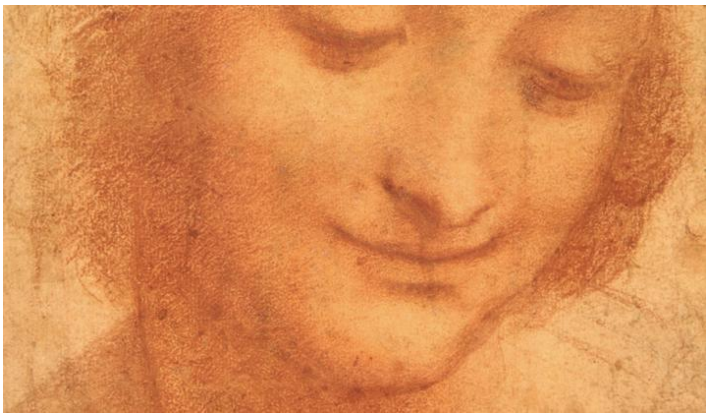


Figure 42. *Study of Saint Anne, red chalk (pietra rossa)*
Inv.270, Gallerie dell'accademia, Venezia

A second drawing, preserved at the Gallerie dell'Accademia in Venice, deserves equally close attention (figure 42). This study of Saint Anne, executed in red chalk, once belonged to Francesco Melzi, Leonardo da Vinci's pupil and direct heir to his collection of drawings. Long kept in his possession, it later passed through several prestigious hands, including those of Cesare Monti, Venanzio de Pagave, Giuseppe Bossi, and Luigi Celotti, before entering the Venetian collections. It was consistently attributed to Leonardo da Vinci until a reattribution in the 1950s, which remains controversial today, particularly due to the exceptional quality of the drawing, the softness of the modelling, and its stylistic coherence with other original works by Leonardo[54].

This drawing displays an extraordinary subtlety in the modulation of tonal values, achieved without the use of any contour lines. The modelling of the face, especially the mouth, reveals a masterful use of sfumato: no line defines the forms, which emerge instead from a gradual transition between light and shadow. This technique creates the illusion of flesh without any visible drawing, following a principle found in Leonardo's most iconic works. Everything suggests that this is a preparatory study for a painted composition, a crucial step enabling the artist to anticipate the complex layering of glazes, the

superimposition of tones, and the delicate balance between dissolution and emergence of form, in other words, the very mechanism of his sfumato.

The face of Saint Anne *(figure 43)* bears a striking resemblance to that of the Leda at Wilton House *(figure 44)* and to the Louvre's *Saint John the Baptist (figure 45)*. It is reasonable to believe that the disturbing proximity between the *Saint Anne drawing* at the Gallerie dell'Accademia in Venice and the Wilton House painting may have led to a parallel reassessment in the mid-20th century. Once the drawing was excluded from Leonardo's corpus, stylistic consistency may have demanded that the painting follow.

Figure 43. *Study of Saint Anne*
Gallerie dell'Accademia, Venezia

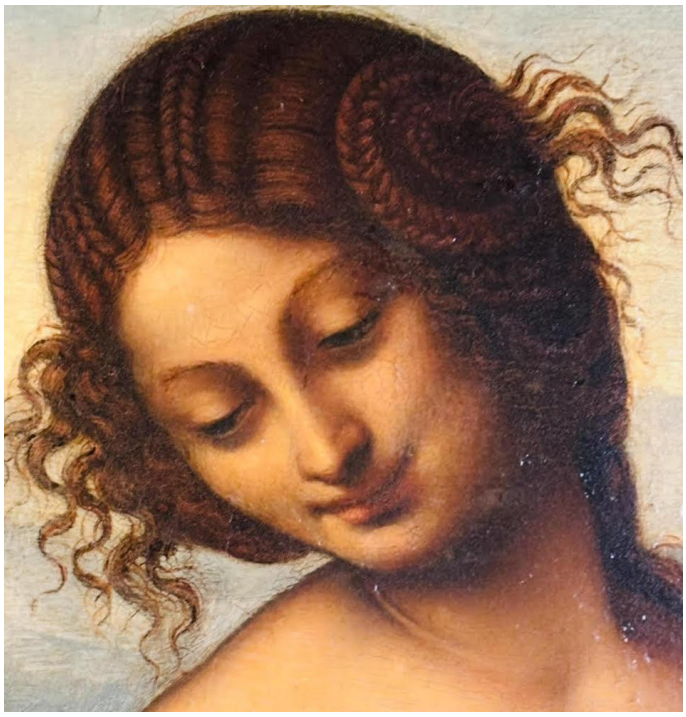


Figure 44. *Leda and the Swan*
Wilton House Trust, Collection earl of Pembroke

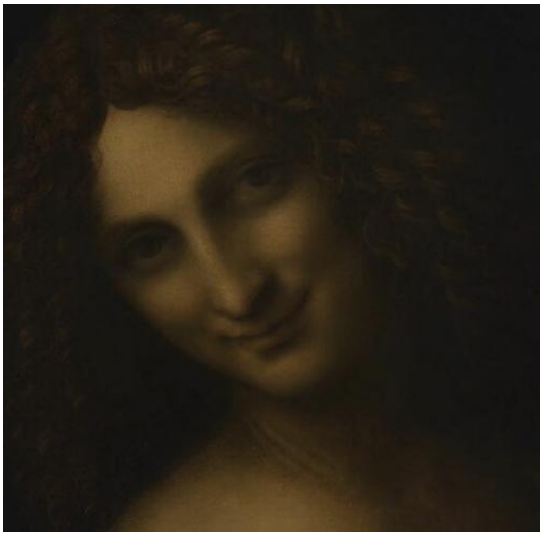


Figure 45. *Saint John the Baptist*
Leonardo da Vinci
Louvre Museum

Upon close observation of the composition of the painting preserved at the Louvre *(figure 46)*, both female saints have broad shoulders and a powerful, almost masculine bodily structure, which is

immediately counterbalanced by the softness of their features and the diffuse grace that emanates from their presence.

Figure 46. *Saint Anne, Virgin and the child*
Leonardo da Vinci
Louvre Museum

A close observation of the feet of the Virgin and Saint Anne *(figure 47)* reveals an anatomically rigorous construction identical to that of Leda preserved at Wilton House *(figure 48)*. In all three cases, the painter employs a complete mastery of modelling, where each toe is individualized, precisely articulated, and animated by a slight tension. The volumes are rendered with great subtlety through a controlled interplay of light and shadow, revealing the bony reliefs, the folds of the skin, and the internal dynamics of movement.

Such mastery reflects the work of a scientific mind, and only Leonardo da Vinci, strengthened by his long studies of human anatomy, possessed such an intimate knowledge of the functioning of joints and the internal mechanics of movement. This deep understanding of the body enabled him to reach an unparalleled accuracy in the representation of the living[55].

Figure 47. *Saint Anne, Virgin and child*
Leonardo da Vinci
Louvre Museum

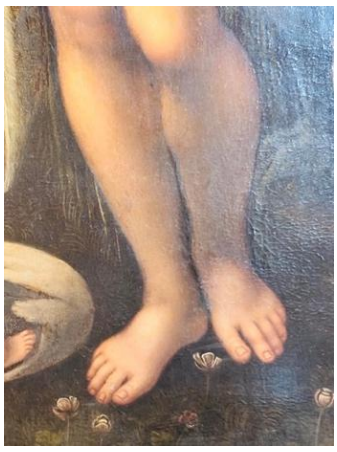


Figure 48. *Leda and the Swan*
Wilton House Trust
Collection of earl of Pembroke

Beyond this scientific and artistic mastery, Leonardo's study of the body is also part of a philosophical approach. Form becomes the locus of thought, a reflection on the very nature of man.

In the version preserved at Wilton House, this wisdom of mind is embodied in the figure of Leda, where androgyny[56], reinforced by the choice of Salaì as the model, reveals a profound mythological dimension, directly inspired by Ovid's *Metamorphoses*. The nymph, impregnated by a god who has taken the form of a swan, incarnates the point of conjunction between the human and the divine, between masculine and feminine principles. This union of opposites, far from being merely narrative, reflects an underlying Neoplatonic philosophy, according to which true harmony is born from the synthesis of polarities that enables access to a higher state of equilibrium.

It must be recalled that Leonardo was a mind of rare depth, driven by universal curiosity and nourished by philosophical, poetic, and scientific readings. For him, art was never dissociated from thought. The choice of the theme of Leda cannot therefore be reduced to a simple narrative subject, for it carries an evident symbolic and intellectual density.

Thus, in the Leda, the choice of an androgynous representation probably reveals, beyond the quest for an ideal, the fullness of being born from the fusion of opposites. Leonardo seems to affirm that the masculine and feminine principles, both intrinsically linked, stem from the same essence.

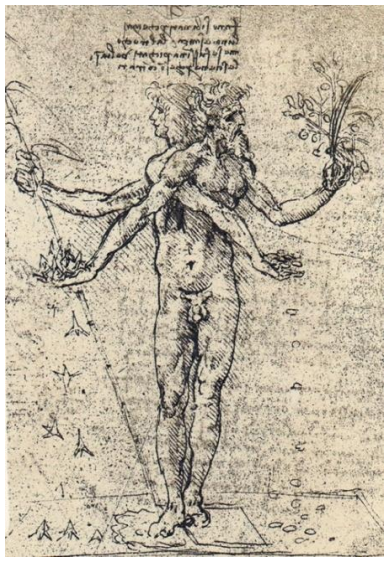


Figure 49. *Drawing, Allegorical figure, circa 1480*
Leonardo da Vinci
Christ Church Picture Gallery, Oxford

A comparable idea can be found in a drawing by Leonardo da Vinci depicting a young man and an older man united within a single body *(figure 49)*. This image embodies the union of opposites, youth and old age, through the physical traits and symbolic attributes of the two figures. Once again, Leonardo expresses the notion that all opposing forces strive toward unity.

A quote[57] by Leonardo on two opposing emotions reaffirms this idea:

> *"Pleasure and pain are represented as joined together in the same body… They are like inseparable twins. […] Where one is present, the other is always nearby."*

Figure 50. *Study of Leda*
Leonardo da Vinci
Royal Collection Trust, RCIN 912516

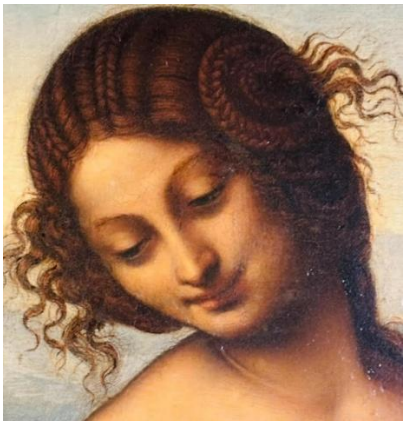


Figure 51. *Leda and the Swan*
Wilton House
Collection of Earl of Pembroke

In his studies for the Leda, Leonardo used a female model specifically for the study of the hair. Moreover, the degree of correspondence between the preparatory drawing held at Windsor (RCIN 912516), likely the most fully developed study on this motif *(figure 50)*, and the hairstyle of the Leda in the Wilton House painting *(figure 51)*, is exceptional, both in overall structure and in the extreme refinement of detail. A copyist or follower might have produced a loose interpretation, an approximation inspired by the model, but never with such formal exactitude. This treatment reveals an intimate understanding of the material, a reading of the internal rhythm of forms, and an intelligence of movement that can only belong to a creator fully in command of his gesture. No other known version offers such an advanced rendering of the hair, which here becomes a structural element of the composition, both ornamental and symbolic.

For Leonardo, hair became a true field of exploration for natural dynamics. As a living, free, and mobile material, its treatment, braided, sculpted, coiled, directly links to his research on vortices, fluids, and spiral forces. Through the hairstyle, Leonardo sought to think the living within form, to organize that which, by nature, escapes containment. Thus, hair becomes architecture, but also a condensed figure of nature itself, of its energy and its hidden unity.

Figure 52. *Study of Saint Anne, Virgin and child*
De Vinci, British Museum

Figure 53. *Leda and the Swan*
Wilton House Trust, Collection of Earl of Pembroke

The dating of *Leda and the Swan* can be placed close to that of *The Virgin and Child with Saint Anne,* given the strong formal connections between the two works. Among the many preparatory drawings made for the religious scene, one shows the figure of a leaning child *(figure 52),* with the right arm extended, a gesture of expression that Leonardo ultimately chose not to include in the final version of the painting. And yet, a child in the same pose reappears in *Leda and the Swan* at Wilton House *(figure 53).* This transfer from one study to another could indicate that both compositions were conceived during the same period. This hypothesis is further supported by the striking resemblance between Saint Anne and Leda, which underscores the temporal proximity in the execution of both works.

Conclusion

At the conclusion of this study, based on a cross-examination of texts, inventories, and the circulation of artworks throughout 17th century Europe, a coherent and converging body of evidence makes it possible to formulate the hypothesis that the Leda and the Swan at Wilton House may indeed be the long-lost version by Leonardo da Vinci. The pictorial quality, contemporary sources, stylistic coherence, and scientific precision of the execution invite a serious reconsideration of its place within the master's body of work. However, a definitive attribution cannot rely solely on technical and historical impressions, however refined they may be. To move beyond critical debate and eliminate all ambiguity, a full campaign of scientific analysis is imperative. Only by combining the intelligence of sources with the rigor of science can we come close to understanding the truth of a work as complex as this one.

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