The importance of Leonardo's *Trattato della pittura*, or *Treatise on Painting*, for French art and especially French art theory cannot be overestimated. When it was published in 1651 (that is, 130 years after the artist's death) French art theory did not exist. The treatise came out in Italian and French in a lavish folio edition by the Parisian publisher Jacques Langlois, edited by Raphael Trichet du Fresne, translated by Roland Fréart de Chambray. The institution that soon was to address this problem, the Académie Royale de Peinture et de Sculpture, had only been founded three years earlier, in a politically most difficult situation. Admittedly, reflections on art were not unknown – for example in Martin de Charmois's petition for the foundation of the art academy of 1648 – and questions regarding art were being discussed,¹ but art theory was primarily an Italian phenomenon. This would change with Leonardo's *Trattato*. It stands at the beginning of a long row of texts, with which France soon was to leave Italy far behind in art theory. The 1651 edition is not only significant as initial trigger but it influenced subsequent discussion for a long time. With the *Treatise on Painting* that success was achieved that François I had hoped for in vain when in 1516/17 he invited the aged Leonardo to France to lend new impulses to French art.

The publication of the *Trattato* involved three people who were important for the further development of French art and whose prominent positions guaranteed wide recognition: the owner of the manuscript, Paul Fréart de Chantelou, who had attained art historical fame through his diary of Gianlorenzo Bernini's visit to Paris; the French translator of the manuscript and brother of the latter, Roland Fréart de Chambray, who with his *Idée de la perfection de la peinture* had composed one of the first French art theoretical texts; and finally Nicolas Poussin, who prepared the designs for the illustrations.² The most immediate response came from the Académie.
Even if the institution hesitated in acknowledging the development of an art theory as its responsibility - it only became active in this area with the onset of the conferences in 1667 - it thankfully took up Leonardo's ideas in order to systematically give form to its main responsibility: the education of artists. Besides the immediate use the academicians could derive from the publication, the desire to take advantage of Leonardo's reputation may also have played a role since the artist, even if he had spent only the last two years of his life in France, counted as the first 'French' artist of world fame. As late as the early nineteenth century Jean-Auguste-Dominique Ingres, in his *Death of Leonardo da Vinci in the Arms of François I*, paid homage to the Italian artist as a Frenchman (Figure 12.1).³

The immediate reactions to the *Traité* were many and diverse. Here will be discussed only those influences and references important for the development in the eighteenth century. Two subjects were of special interest to the academicians: Leonardo's explications on the representation of the human body, and on perspective. For the study of human anatomy, which was taught at the Académie, the academicians did not make use of Leonardo's detailed studies but of the epochal work of Vesalius, or rather anatomical
atlasts for artists derived from it. The academicians considered color, broadly treated by Leonardo, accidental; it never belonged to the educational canon of the institution. At the centre of artistic education at the Académie was the representation of the human figure. Although Leonardo did not offer a detailed curriculum - for this the edition was not sufficiently systematic - some pivotal suggestions could be derived from his observations. The most important of these for the academicians seems to have been the suggestion to dissemble the human body, especially the face, into its individual parts, to describe the movements of these parts, and to reassemble them in the manner of building blocks. Thus Leonardo advises the artist to memorize four facial features - chin, mouth, nose and forehead - and to reconstruct the face from these features from memory as faithfully as possible. He writes, focusing more strongly on art students than on finished artists:

If you want to remember the look on a face without difficulty, first learn to draw several heads, mouths, eyes, noses, chins, necks and shoulders well; and, for example, [learn] that there are 10 types of nose: straight, bumpy, concave, raised above or below the middle, aquiline, even, flat or squashed, round or pointed - these are for seeing in profile. For those being seen head-on, there are 11 different forms: even, thick in the middle, slender in the middle, thick at the tip and slender near the eyebrows, slender at the tip and thick at the top, wide nostrils, narrow nostrils, high, low, snub, and other nostrils turned down and covered by the tip of the nose. Similarly you will find peculiarities in even the slightest facial feature, and you must observe every one in nature to put them into your imagination. Or, indeed, when you have a face or one of its features to paint, take notebooks with you in which you have drawn similar remarks and observations. Having taken a quick glance at the person's face, go and examine your collection of sketches to see which kind of nose or mouth this one resembles, and make a small mark as a reminder, and then, back at home, use it to work from.

Similarly, the division of the body into separate parts was aimed at conquering the difficulties of representing nature. Leonardo was concerned with developing a strategy that allowed the artist to study in nature a human being, and especially a human being in motion, and to reproduce him/her in immediate proximity to reality. The academicians took over these ideas on systematization; what they made of it however was far removed from Leonardo's original intentions, teaching the study of the human figure in a succession of clearly defined steps of increasing level of difficulty. At the beginning the student was asked to copy individual body parts after graphic models: eyes, noses, mouths, ears, hands, feet, etc. The next step was the combining of these parts to create faces, arms or legs, and finally the whole human figure - always after graphic models. In a second procedure, following the same sequence, the student was asked to copy from three-dimensional models - plaster heads, hands, arms, feet, or legs - before studying the entire human figure at hand of plaster copies of antique sculptures. This second procedure required greater skills in transferring a three-dimensional model to the two-dimensional medium of drawing and in dealing with the problem of light and shadow. Only in the third instance
Charles Le Brun, Expressions of the Passions: *Le mepris et la haine*, drawing

was the student allowed to work from the living model, thus reaching the pinnacle of his education. The professor on duty arranged for a model to inhabit a certain pose, frequently a pose in motion momentarily frozen in time. The importance of this step in the education of the artist is emphasized by the designation of the model as 'académie.' That this procedure was crucial, even for one's later artistic progress, can be seen in the fact that members of the Académie participated at these life sittings in order to exercise their skills, or to assemble a repertoire of figures for later use. The students who succeeded in this last class could participate in the Grand Prix, which required a multi-figured composition and presented the end of one's artistic education. For this task the various studies after graphic or three-dimensional models were of special use, because a composition consisted above all of the combination of individual figures. Approximation of nature did not go beyond the study of the posed model.

Even if Charles Le Brun's expressions of the passions did not belong to the immediate educational canon, they nevertheless were conceived in the same form and thus fit perfectly the systematics of the Académie. Here too we find the dissolution of the face into separate parts – eyes, eye brows, nose, mouth, cheeks – which then, in their respective changes, are reassembled into different forms of expression (Figure 12.2). Here too Leonardo stood god-father, but
here too the connection is merely superficial. If Leonardo wanted to develop a system by which reality could be captured, so Le Brun pursued his wish of developing a form for reproducing the passions by increasingly abstracting experienced reality. The results were reached systematically, not studied after nature. The goal of the academicians was not a better understanding of nature but the liberation of the artist from nature and its study. And thus Le Brun did not only follow René Descartes in the differentiation and description of individual affects but also in the process, since the philosopher had stressed that his system did not rely on the observation of nature but on reflexion. As in the nucleus of artistic education, here too we suspect correspondence at first sight. In reality however Le Brun’s interests were fundamentally different from Leonardo’s.

The systematization of education with the exclusion, to a large degree, of the experience of reality yielded above all two advantages for the academicians. Firstly, the young artist could approach his task slowly; art could be learned along rational lines. Secondly, the process allowed for abstracting from a model, from a concrete reality, and for eradicating accidents of nature, so that it satisfied the demands of an idealistic image of art. This art could refer to a systematically ordered education that promised success, whereas the art form competing with academic idealism, which was more strongly orientated towards reality, did not possess a comparable educational concept. Thus the academicians distanced themselves from Leonardo’s ideas, from which they had taken their beginnings, to develop, in the last instance, a counter-model to the Italian’s treatise.

The second area in Leonardo’s Trattato that especially interested the academicians is only mentioned briefly here, since it is discussed in detail elsewhere. It concerns perspective. The engraver Abraham Bosse, who was appointed Professor of Perspective at the Académie, orientated himself to the indignation of those responsible, on the writings of the mathematician Girard Desargues, requiring a strictly geometric perspective construction. The director of the Académie, Charles Le Brun, on the other hand, depended on Leonardo’s Trattato in discarding Bosse’s measures as ‘unartistic.’ The dispute was decided with Bosse’s expulsion from the Académie on 7 May 1661. In the eighteenth century the issue was of secondary importance, not least because the painting of ceilings, which had especially kindled the discussion, no longer was of primary concern.

The academicians made use of Leonardo’s Trattato in the initial stages of their institution in order to develop a curriculum. In the eighteenth century, however, the treatise gained its special significance not in the underpinning of academic positions but above all in the criticism of precisely the positions that had been developed in reference to it. Criticism concentrated on two genuine academic areas: artistic education with the representation of the human body as its most important aspect, and the expressions of the passions as formulated by Charles Le Brun, which was supposed to vouch for narrative history painting in the sense of Alberti.
and which the Académie pursued uninterruptedly as the pinnacle of art until the end of the eighteenth, indeed, well into the nineteenth century. Academic education and academic art seemed frozen; rescue was promised in the form of Leonardo's *Trattato*. It was believed that with its help the central claim running through the entire eighteenth century, along which artistic achievements were measured, could be fulfilled: the orientation towards reality. In the course of time it transpired that even a number of academicians sought to reform their institution, which had entered a crisis, with the help of Leonardo's suggestions.

As instruction in the representation of the human body and the expressions of the passions was intimately linked in the systematics of academic doctrine, so the criticism of both areas can rarely be separated. Critics of Le Brun's treatise often had before their eyes the education at the Académie, especially the study after the model, whereas the critics of the Académie formulated their objections in view of the representation of the emotions. The two areas belonged together. Thus the first critic of the Académie, Charles-Alphonse Du Fresnoy, intimate enemy of Charles Le Brun, formulated his objections to academic education, referring to Leonardo's treatise, in connection with the representation of passions. After he set forth that the expressions of passions studied and memorized by a model would never correspond to reality, Du Fresnoy refers, as the only possibility for study, to Leonardo's suggestion to observe people in the streets with their natural expressions. Leonardo too is the source for his advice that the artist should always carry with him a little sketchbook or tablet in order to record the movements and emotions he had observed, as well as the suggestion to study the movements of mutes in order to lend a figure expression.

With these observations, the central objections of eighteenth-century critics of the Académie were already formulated in the seventeenth century. More were to be added. Le Brun was criticized for not differentiating between gender, age or social status of the person grasped by passion. Neither did he consider the occasion or reason that elicited such emotion, issues which Leonardo had in fact addressed. In the end, the objections all circled around the central issue of the artist's responsibility towards realistic representation. This problem first concerned the passions, which are of short duration and which for that reason are difficult to study, but which equally cannot be posed by a model. André Félibien already had referred to this difficulty, suggesting that the artist, if the study of nature failed him, should fall back on his knowledge and the rules of art. Roger de Piles excluded such a solution: it is impossible to set rules for this area of artistic production. As an aid he referred to the study of nature in the sense of Leonardo, of antique statues and of exemplary paintings. But in actuality this area of artistic creation could not be learned; it depended almost entirely on artistic genius, which was a gift from God. In his last piece of writing, *Cours de peinture par principes* (1708), de Piles finally
called upon the imagination, with which the artist should supplement that which was closed to other ways of study. This idea was picked up by Abbé Du Bos in his Réflexions sur la poésie et sur la peinture (1721). Not infrequently we encounter among authors of the first half of the eighteenth century a potpourri of suggestions as how to master the difficult problem of representing emotions. Different methods are more or less eclectically combined, independent of the question whether these methods form a convincing or logical system. Leonardo’s reference to the necessity of studying from nature is rarely absent. Thus the academician Claude-François Desportes, in a text most likely originating after 1760, first lists Le Brun’s treatise, as well as a study of exemplary solutions from antiquity. Moreover, the artist should try to emulate the passions, whose expressions he should then study in a mirror. Finally he quoted Leonardo’s advice to study people in real life, for example at a quarrel.

Leonardo upheld the view that it was the duty of the artist to follow nature. The more closely this view was adhered to in the eighteenth century, the clearer and more convincing was the reference to his treatise. The rise of the importance of Leonardo the theoretician was accompanied by increasing respect for his work, especially his physiognomic studies. Thus the amateur, art theorist and archaeologist Anne-Claude-Philippe de Tubières, Comte de Caylus, etched a series of these studies, which he published in 1730 under the title Recueil de testes de caractères et de charges dessinées, par Léonard de Vinci Florentin (Figure 12.3). The prints represent an amateurish counter-effort to Le Brun’s studies, illustrating in exaggerated manner Leonardo’s search for realism, indeed an extreme, ugly form of realism that removes itself from the idealization in the sense of the Académie. It is a realism, in which the border between physiognomic study and caricature is consciously blurred. Although the physiognomic studies were highly thought of in the eighteenth century, and although they were seen as evidence of Leonardo’s process of appropriation of reality, as described in his treatise, a connoisseur such as Caylus knew that they could hardly be transferred to high art – that is, that they were not suitable for history painting. They were drawn art theoretical reflexions – finger exercises, sought after and valued as such. They were, however, not able, or not strong enough, to serve as an argument against the academic doctrine.

Caylus’s etchings were prefaced by a text by the owner of the drawings, Pierre-Jean Mariette, the central concern of which is the duty of the artist to follow nature. It is only by turning to nature that the artist can study movement and co-ordination of individual body parts, can learn the play of muscles or the passions and their expression. For this, according to Leonardo, the artist had to go into the streets and observe the people, which in eighteenth-century consciousness meant lower-class people. Unsatisfied with the plainness of Leonardo’s advice, subsequent authors embellished it with legends about the origin of Leonardo’s studies. Thus Mariette reports,
referring to Giovanni Paolo Lomazzo, that Leonardo, wanting to paint a group of merry peasants, invited some simple folks for dinner, all the while entertaining them with stories. After carefully studying gestures and facial expressions of his guests, he went to his studio after their departure to draw them from memory. The author also describes how Leonardo had gone to places of execution in order to observe the horror and fear in the faces of the condemned.\textsuperscript{27}

According to the classical theory of painting, studies produced in this manner above all would be suitable for genre painting. Leonardo however succeeded with his procedure also in history painting, as Mariette pronounces
at hand of the Last Supper in Milan. The artist had found models for the apostles in real life, showing them all in an excellent manner with different, emotionally highly expressive physiognomies. Two characters however had posed great difficulties, Christ and Judas, embodying as they do the two extremes of divine and evil. For the representation of Judas, Leonardo found a solution by choosing as a model the prior of the Dominican monastery who had angered him. Only for Christ he could not find a suitable model ‘to represent the union between Divinity and the human form.’ Even his imagination had failed him. The possibilities and limits of Leonardo’s method are herewith stated. Following the long discussion of the Last Supper, Mariette refers to the little tablet, which the artist always carried with him in order to record instantly his impressions after life. Finally, Leonardo considered it sensible that artists should establish a collection of drawings with different types of ears, noses and mouths, all observed from life, in order to simplify their work.

Mariette's text goes far beyond an introduction to Leonardo's physiognomic studies. He furnishes proof that Leonardo’s method not only brought forth grotesque heads whose attraction did not extend far beyond their strangeness, but that it also offered a sound method for high art, capable of providing a counter-model to the academic process. Leonardo’s method thus advanced from one of many procedures to a complete concept. And it is this concept that Caylus took up again almost twenty years later when he pondered the problem of how contemporary art, which was in a deep crisis at the time, was to be revived. Unlike Mariette, however, he could not bring himself to agree with Leonardo’s proposition that an artist’s duty to follow nature is the only solution. Rather, he tried to combine this method with the concept of academic art.

According to Caylus, the fundamental malady was the fact that art was constructed. In a lecture titled ‘De la composition,’ held on 5 December 1750 in the Académie, he describes how, in his view, a work of art was composed:

You compose ... or, rather, you group together and find a figure that is successful and striking thanks to the development and beauty of its contrasts; you decide to make it the dominant figure and it is the starting point for all the others. This figure can indeed be as it appears for the mechanics of art, but its movements will be too strong, or its resting position inappropriate; in short, its entire pose could quite easily be unsuitable for the intended subject.

More figures were to be added; a relationship was being established among these figures as well as to the main figure; the figures were draped and integrated into the whole compositional scheme. The artist indeed created his composition from nature, ‘but in his workshop, always with the same light, always against the same background.’ The body of the hero is overloaded with muscles regardless of whether a prince really looked like that. And, finally, the heads would indeed be arranged in relation to each other, ‘but they do not express any passion, no hint of character is apparent: they are
simply heads, with eyes, a nose, a mouth .... You feel happy when you have drawn pretty women; however the look on the heads and the shape of the faces could fit a completely different action ....' The painting remains cold since it expresses no passion. The criticism culminates in the exclamation, 'that all these details have not produced a picture, but a poor assembly of several parts of the painting.'

Even if Caylus in his criticism did not specifically refer to Leonardo's treatise and only vaguely set forth the positive counter-image of a 'composition du génie' at hand of Raphael's Hampton Court cartoons, two points nevertheless are important in this context. The first concerns the method practised at the Académie to construct a composition from set pieces, resulting not in a uniform whole but in an assemblage of individual parts. The second point concerns the reference to nature, more precisely, the problem, especially in regard to academic training, that a posed model certainly is a product of nature, but that it is not natural.

This difficulty identifies the area especially close to Caylus's heart: the expression of the passions. This was to him the most significant weak point in contemporary art, to which he returned repeatedly. His first thoughts on the subject were presented in a lecture titled 'Sur la manière et les moyens de l'éviter,' held on 2 September 1747, in which he investigated the difficulties of the study after nature. Nature is not perfect, and thus the artist cannot reproduce nature in the form in which he encounters it but has to correct it. This necessity, however, contained the danger of appearing mannered, a danger especially prominent in the representation of the passions. He completely discarded Le Brun's theory of the expressions of the passions. What remained was the study of exemplary works of art, especially by Eustache Le Sueur or Raphael. In order to avoid the danger of creating cold images through mere copying, Caylus refers to Leonardo's method, who in innumerable drawings after nature not only studied spontaneous emotions but also the traces these emotions left on the face. Through continuous study of nature Leonardo achieved perfection in this area. But Caylus failed to recognize in Leonardo's model of the study of nature the only purposeful method. As highly as the amateur and theoretician valued Leonardo's results, which after all he had etched himself, as skeptical was he when it came to accepting the process described by the Italian as the only method for high art. Thus he criticized the misuse of the method among Leonardo's followers; indeed, he did not want to excuse Leonardo himself:

Leonardo continually drew ... the features of the soul, of emotion and of the character, but always with the same precision; he accentuated them to remember them or find them again more easily. This very commendable practice, which I urge you to adopt, ... was later misused, and what was just the serious study of how to express passions became the subject of criticism and ridicule. Perhaps Leonardo sometimes even practised it in that way. But this continually repeated study always produced an advantage for the painter, who drew with care and with the intention to learn.
Leonardo's method thus serves as a correction, designed to prevent the danger of falling into a mannered style. According to Caylus, it is suitable for the study of the human psyche over a longer period of time, but not for providing an immediately transferable artistic model. It is only the combination of the two methods – the study of exemplary solutions and the study of nature – that will yield a satisfactory solution.

The actual proposal remains comparatively vague, especially in regard to its transformation into an institutionalized educational system. Here Caylus, who since 1731 was *amateur-honoraire* of the Académie, quickly sought help. On the one hand he wanted to urge the students to concern themselves continuously with the emotions and their visual representations; on the other, he wanted to offer a method that could be taught. The means was the *prix d'expression*. Caylus had first suggested the institution of such a prize in 1753. However, after the academicians failed to proceed in this matter, Caylus donated the prize himself in 1759. From then on, the competition was held annually, with few interruptions. One of the professors, chosen by lottery, had to select a live model and instruct him/her in such a way that he/she was able to act out an emotion over a period of three hours. The model was not supposed to be old; special value was set on his/her honourableness:

You must be careful to avoid choosing loose women or beggars as subjects, or any others whose base habits and facial characteristics would make them incompatible with the study of beautiful forms which must be the only form of expression in this competition.

The conditions of the competition largely follow the procedure Caylus had proposed in his lecture ‘De l'étude de la tête en particulier,’ of 6 October 1759. The ideas, however, did not harmonize so well with the reference to Leonardo, who still played an important role in Caylus's lecture ‘Sur la manière et les moyens de l'éviter’ of 1747, or with the amateur's preference for the Leonardo studies he had etched. The idea of studying an emotion after a model repeatedly had been discarded as of little promise especially with reference to Leonardo. Moreover, the exact regulations in the selection of the model apparently were meant to exclude precisely those people whom Leonardo primarily had studied. Still, Caylus's ideas seem to be developed from his occupation with Leonardo's treatise.

As important as the study after nature was for Leonardo, he also seems to have considered work after the model necessary. For he was fully conscious of the difficulties of the former, since the phenomena to be observed were frequently of such brief duration that they could barely be sketched once. Consequently he suggested that the impressions observed in nature should be reproduced by the model. The model however could only accommodate the study of the anatomical and physiological circumstances accompanying the passion, but not the passion itself.

... the painter must notice the attitudes and movements of men immediately after they have been caused by whatever sudden minor event, and he must observe
them right away, and sketch them in notebooks to remember them, and not wait for example for the act of crying to be imitated by someone who has no reason to cry, in order to study the expression of this model. Because such an act with no real cause will not be spontaneous or natural, it is much more valuable to have noticed it beforehand when it was original and natural, and then to make a model repeat the action to help your imagination a little, and to try to discover something else about the subject, and then to paint afterwards.38

Leonardo thus sees the study of passions on two levels: the study of the passion in real life, and its re-enactment by the model. Similarly, Caylus sees a division in two parts. The first part the student has to accomplish himself in his own personal study, to which Caylus intended to contribute with his competition; the second part took place during the competition. Contrary to Leonardo, Caylus was convinced that the model was able to represent a passion.39 In order for the model to fulfill this task, Caylus recommended to the professor who chose the model not merely to inform him/her of the passion he/she was to enact, but to tell him/her the story from which the moment of passion had been taken, thus helping him/her to transport him-/herself into the required emotion. The model was not to present some abstract passion, as for example found in Le Brun, but was to act out emotionally a concrete situation, the only catch being that the model had to remain in this position for three hours. It is possible that Caylus received suggestions for his ideas from contemporary theories about the theatre.

Caylus seems to have developed another idea in his examination of Leonardo's treatise, even if at first sight it seems to have nothing to do with the Italian master's ideas. This concerns the exact identification of the model, not so much in reference to his/her physical appearance as to his/her social status and character. Leonardo's process seemed useless to the academicians, since they had no use for street people. These were at most useful as models for tavern scenes in the style of Jan Steen, but not for history painting. Therefore Caylus decided on people as models who would satisfy the demands of history painting. In place of Leonardo's directly experienced reality, we find with Caylus a selective reality. And here too the theatre may have stood godfather.

Caylus's attitude towards Leonardo's ideas is thus ambivalent. Admittedly he found in the Italian artist's treatise important stimuli for reforming contemporary art, but his admiration was not without reservations. Among artists, it was Raphael and Eustache Le Sueur who were exemplary; the name Leonardo da Vinci does not appear in this context.40 The physiognomic studies etched by Caylus held great attraction for the connoisseur and collector; they constituted - comparable to the caricatures and capriccios - realms of experimentation, on which new ideas could be tested, but they were of no use in reforming high art.

The prix d'expression was, in the view of many contemporaries, a failure. The results did not remedy the process of studying the passions after a model, a failure generally attributed to its impossibility. During the founder's
lifetime, criticism was restrained but, after his death in 1765, reservations were expressed more frequently. Thus, in a letter of 28 September 1770 to the Surintendant des Bâtiments Marigny, the newly appointed Premier Peintre du Roi and director of the Académie, Jean-Baptiste-Marie Pierre, declared the competition a failure, placing the fault with the models, who were not able to perform their task.\(^4\) The conseiller and secretary of the Académie, Charles-Nicolas Cochin, who artistically was rather removed from Pierre, began his objections at precisely the same point. Already in 1759 he had predicted that the most considerable difficulty would be finding a suitable model.\(^42\) In a proposal for the reform of the prix d’expression, apparently worked out in 1776, he further complained that the donor’s hope to stimulate students to an intensive study of the emotions beyond the confines of the competition, had not been fulfilled.\(^43\) Taking both points under consideration, he suggested that the competition should not be held once but three times a year, and that the model should not be selected by one professor but by each participant himself. Three months before the competition, the students were to be informed of the nature of the emotion to be represented and whether the emotion was to be expressed by a man or woman. Thus the participants were given the opportunity to select a model from among their families or friends and to study him or her over a period of time. The intensive contact with the model would moreover grant the possibility to study the required expression repeatedly, thus compensating for the fleeting nature of emotions.

Among academicians, Cochin came closest to Leonardo’s ideas of turning towards nature. He removed the selective stature of the model that it occupied with Caylus. The model was, again, a normal human being; students were able to study him/her in daily life, even in unobserved moments. Cochin’s ideas are connected to the pedagogical concept of individually responsible learning and working, ultimately derived from Jean-Jacques Rousseau.\(^44\)

Cochin went to the limit of institutionalized artistic education; indeed, according to a no-longer identifiable fellow-academician, went beyond it.\(^45\) If one were to follow Cochin’s suggestions, the results could no longer be controlled since the works originated outside the Académie, which would not exclude outside help. Perfectly aware of this objection, Cochin had not paid it special attention. The anonymous academician was looking for a compromise: the theme of the competition was supposed to be relayed to the participants eight days before the event so that they could prepare themselves with the help of a model chosen from their respective families. Later, in the rooms of the Académie, the participant should work from the same model. Thus far, not greatly different from Cochin’s ideas. Similar to Caylus, the anonymous academician placed great value on the belles formes of the model, which Cochin’s proposal with its fortuitous selection of the model no longer guaranteed. For this reason the participants were allowed to bring, besides the model, four copies of famous antique heads into the cabin in order for their work to undergo some form of control.
The crucial point in all these deliberations was the model. Ultimately, all efforts were directed at finding a practical compromise between the demands of, on the one hand, an institutionalized academic artistic education and ideally inspired aesthetic demands with, on the other, Leonardo's counter-model. That, in the end, the Académie turned to a minimal solution by announcing the subject of the competition only one week before the event and by leaving everything else as was, proves that the institution did not truly desire an approximation of Leonardo's ideas. For the critics this could only be yet another proof of the inability of the Académie to undergo reform. In view of the dogmatic position of its director, Jean-Baptiste-Marie Pierre, one cannot but help suspect that the time of preparation was meant to be spent less on studying a model chosen by the participant than on consulting Le Brun's treatise.

The unsatisfactory character of the prix d'expression lies in its ambiguity. Its goal was to mediate between two fundamentally different, indeed mutually contradictory procedures. As amateur, Caylus was aware of Leonardo's solutions; as reformer of high art, however, he believed he had to stay within limits that would have been crossed in following Leonardo's methods. These limits did not matter to the critic Denis Diderot who was free to polemicize against the existing system without having to come up with an alternative acceptable to the Académie, as Caylus intended. Thus he was free to argue uncompromisingly, especially in regard to the question of the model. For Caylus, the model was an important link mediating between nature and the demands of art. Cochin, too, in principle held on to the model. Until then, doubt at the importance of the model as a central aid in artistic education had not been raised in any fundamental way. This changed with Diderot:

These seven years drawing after the model at the Academy, do you consider them well spent...? All these studied, artificial, carefully arranged academic poses, all these movements coldly and ineptly imitated by some poor devil, and always the same poor devil, who's paid to appear, undress, and let himself be manipulated by a professor three times a week, what do they have in common with postures and movements in nature? What does the man drawing water in the well in your courtyard have in common with another who, not pulling the same burden, awkwardly mimics this action, his two arms raised, on the school's posing platform? What does a person pretending to die have in common with another expiring in his bed or beaten to death in the street? What does an artificial wrestler have in common with the one on my street corner? This man who begs, prays, sleeps, reflects, and faints upon request, what does he have in common with a peasant stretched out on the ground from fatigue, with a philosopher meditating at his fireside, with a suffocating man who faints in the crowd? Nothing, my friend, nothing.66

Until Diderot it was generally accepted that the model was to be regarded a part of nature, as equivalent of nature; for Diderot, however, there was an unbridgeable contradiction between the two.

I once knew a young man of excellent taste who, before making the smallest stroke on his canvas, would get down on his knees and say, dear Lord, deliver me from
the model. ... A hundred times I have been tempted to say to young students I encountered on their way to the Louvre with their portfolios under their arms: My friends, how long is it you've been drawing there? Two years? Why, that's too long. Leave this shop of mannered tics. Go to the Carthusians, and there you'll see real attitudes to piety and compunction. Today is the eve of a high holy day; go to a parish church, prowl around the confessionals there, and you'll see real postures of meditation and repentance. Tomorrow go to a tavern, and you'll see the real movement of an angry man. Seek out public gatherings; be observant in the street, in public gardens, at the market, in private homes, and you'll obtain an accurate idea of true movement as it is in the activity of life. Look at your two comrades arguing with one another; note how, without their realizing it, it's the dispute that determines the placement of their limbs. Examine them carefully, and you'll take pity on your insipid professor's lessons and your insipid model's imitations.

Truth can only be found in real life; it could not be experienced through the mediation of a model. Artistic education, as practised in the Académie, thus was fundamentally called into question. With the issue of the model Diderot not only opened for discussion the problem of academic education but academic art. Indeed, the legitimacy of the institution of the Académie was threatened. The reference to Leonardo's painting treatise cannot be overlooked.

Thus the Trattato was invoked, on the one hand, to reform the Académie and its educational system, on the other, to fundamentally question the institution and its work. And both parties, like the adversaries Caylus and Diderot, could summon Leonardo's observations with equal justification. The relative openendedness of Leonardo's argumentation allowed his being invoked as a source for different, even mutually exclusive positions. Indeed, it allowed the founding fathers of the Académie to develop a curriculum with the help of the treatise, which in the eighteenth century was opposed in reference to the same treatise.

Leonardo's advice that an artist should record in sketches his impressions collected in nature, repeatedly cited in connection with the representation of the passions, had become an art theoretical standard in the eighteenth century. Even if Claude-Henri Watelet did not intend to follow this idea, he connected Leonardo's advice with the concept of a sketch as a preliminary design of a work of art, as it had been discussed in France, including at the Académie, since the late seventeenth century. The sketch attracted Watelet for different reasons than Diderot. The latter was fascinated by the sketch since it allowed the viewer's imagination more freedom than the finished picture. Watelet on the other hand saw in the quickly jotted-down sketch above all the quality that it preserved to a large degree the fire of artistic genius. Antoine-Marin Le Mierre formulated similarly in 1769 in his poem 'La peinture'; 'The moment of genius is the sketch / That is where you see the verve and fervour of the plan ....' Watelet's and Le Mierre's idea does not seem too far removed from Leonardo's reflections on the representation of the passions. The preparatory sketch too is concerned with the, as far as possible, direct representation of a spontaneous impression, not an impression gained in the outside world but
an inner impression, the elusive artistic genius. The lightness and directness of a sketch were of course lost in the final painting. With this observation Leonardo’s suggestions regarding the study of the passions advanced from the individual solution to a general method of artistic production, a method taken up later in the nineteenth century.

The 1651 edition of the Traitte remained the authoritative edition throughout the eighteenth century. Two new printings appeared during this time, the first an octavo edition of 1716, published by Pierre-François Giffart, followed eighty years later with a new edition, this time published by Deterville, who brought out a further edition in 1803.53

The reception of Leonardo’s text reached its high point in the 1760s. Now we repeatedly find in the writings also references to other sections of the Trattato, such as the theories on proportion and the movement of the human body.54 With the rise of Classicism, these references become rarer; the observations summarized in the Trattato lost their significance in the solving of artistic problems of the day. Increasingly, philological and even art historical concerns gained in importance. Finally, for the first time, scholarly studies were taken under consideration; indeed, an attempt was made to some extent to understand Leonardo’s observations on art as part of an all-embracing scientific concept. This development was promoted by the Napoleonic spoils that brought a series of Leonardo manuscripts or copies thereof to Paris for a few years.55

The attempts at a new concept found their echo above all in the works of the physicist Giovanni Battista Venturi. Professor in Modena and Pavia, Venturi lived in Paris at the time of the Directory, when the city housed 13 volumes of manuscripts by Leonardo.56 He presented his observations at the most prominent place in Paris at the time, the Institut National des Sciences et des Arts. The institute was the umbrella organization of the pre-revolutionary academies dedicated to the arts, literature, the writing of history and the natural sciences. As such it symbolized the new ideas of an all-embracing concept of learning. Venturi presented his project on 6 Floréal of the year V (1797) to the Classe des Sciences Mathématiques et Physiques, where he found the support ‘to continue this useful work for the History of the Human Mind.’57 Venturi investigated systematically for the first time Leonardo’s scientific studies; his approach clearly was that of a scientist who was looking for the same qualities in Leonardo:

One must … put Leonardo at the head of the Moderns who specialised in Physical and Mathematical Sciences and the real method of studying. It is a shame that he did not publish his views during his lifetime; back then, men of wit turned to fine art, while the majority of scholars continued to get caught up in academic and religious arguments, and the epic of the true interpretation of nature was delayed by a century.58

In the eyes of Venturi, Leonardo’s achievement lies especially in his having developed, taking the sciences as starting point, an all-embracing scientific
concept worthy of being further developed. The sciences constituted for Venturi the new leading disciplines, and thus he had no problem discussing Leonardo's studies in the respective class of the Institut National instead of the Class of Fine Arts.

The writings of a man who, during the Renaissance of letters, was one of the first to embark on a career in the exact sciences, were only to be entrusted to a set of first-rate scholars who could appreciate their worth better than anyone else, and who, far from hiding their treasures, hurried to make them available to those wishing to peruse them.59

Venturi’s goal was a grandly conceived editorial project designed to collect and systematically arrange all of Leonardo's observations on mechanics, hydraulics and optics. As proof of their relevance, he included individual fragments, which he translated and annotated.60 In the following chapter he discusses all manuscripts available to him, their origin and further history.61 In this context Venturi also investigated the *Traitte de la peinture* of 1651. His criticism, however, does not concern Leonardo's observations on individual artistic issues, which until then had defined their reception, but rather is of philological nature.

Da Vinci's *Treatise on Painting* that we know today is just a compilation of different fragments taken from his manuscripts. It was in the Barberini library in Rome in 1630; Cassiano dal Pozzo obtained a copy and Nicolas Poussin produced illustrations for it in 1640. This copy, and another taken from the same source, at Thevenot's, provided the basis for the edition given in 1651 by Raphael Trichet Dufresne. ... Dufresne admitted that this compilation was imperfect in many respects, and badly organised – because the compiler did not understand da Vinci's methodical mind and because pieces belonging to other treatises were mixed in; furthermore, several other chapters that should have been included had either not been seen or were neglected. For example, *The Difference between Painting and Sculpture*, which was said to be a separate treatise by the same author, is simply another chapter belonging to the *Treatise on Painting*. All that would be completed and put in order in the *Treatise on Perspective*.62

Venturi’s study was of crucial importance in the reception of Leonardo's writings, including the *Traitte de la peinture*, even if the edition as announced never materialized. Although Venturi’s main interest concerned Leonardo's scientific studies, he was the first who critically read the texts and who looked for an all-embracing concept. Finally, Venturi examined Leonardo's life. He probably was the first who doubted the tradition that the artist had died in the arms of the French king.63

Venturi's investigations yielded an immediate response in a new edition of the *Traitte de la peinture*, attended to by the painter and writer on art Pierre-Marie Gault de Saint-Germain in 1803.64 In his extensive texts prefacing the treatise, the editor repeatedly refers to Venturi, emphasizing that Leonardo, after three-hundred years, has finally been recognized as a scholar.65 Gault de Saint-Germain also finds traces of the scientist Leonardo in the *Treatise on Painting*. 
The *Treatise on Painting* also places him [Leonardo da Vinci] in the ranks of first-rate physicists, as he established the laws of balance and movement, and demonstrated the influence of the centre of gravity on bodies, as a man who measured force and duration; he also succeeded in disclosing the elements of matter and explaining their essence, as a philosopher who delved deep and went back to the causes.66

Gault de Saint-Germain continues Venturi’s concept when he repeatedly refers to the scientist Leonardo in his attempt at integrating the latter’s artistic and art theoretical works into an all-embracing frame:

As a physicist, he [Leonardo da Vinci] followed the constant and uniform procedures that physics used in its operations. He questioned every science to confirm his speculations in the search for truth, which he intended to demonstrate to others through Painting, a medium that held everyone’s attention at that period. In chemistry, he found ways of analysing different forms of matter and painting them subtly enough for the eye to see space and light. In the study of anatomy, he discovered the art of distinguishing all the raw actions and passions that are the external display of the affections of the soul; and in his deep meditations on mathematics, he reduced composition and scene in Painting to units and uniform proportions. A loyal disciple of nature, he never stopped appreciating it, because he considered it the most perfect original of beautiful things ....67

An observation not fully worked out by Venturi now becomes clear with Gault de Saint-Germain: the scientist and artist Leonardo are one and the same. Both pursue the same goal, namely the discovery of nature. The approach to Leonardo’s *Treatise on Painting* is a new one. This becomes also evident from the fact that Leonardo’s *Vita* is followed by a catalogue of his paintings and drawings, a bibliography and history of the manuscripts. Even if the editor was fully aware that the *Trattato* primarily would continue to serve artistic education, indeed was the only work that encompassed all aspects of that education, he nevertheless took a first step towards an art historical appraisal. Aware of the fact that the 1651 edition repeatedly had been criticized as unsystematic, he additionally consulted a manuscript by Cassiano dal Pozzo from the Biblioteca Albani, which had reached Paris as part of the Napoleonic spoils.68 Thus an attempt had been made, at least to some extent, to produce a philologically correct edition of the *Trattato*.

The step is of great importance, even if the result was disappointing. The annotations to Leonardo’s *Vita* do not go beyond the known texts; here Gault de Saint-Germain relied on the passages quoted in Lomazzo and Mariette. It may also be legitimate to ask if the editorial principles satisfied the demands of the editor. Gault de Saint-Germain held on to traditional views more than he admitted; his catalogue of Leonardo’s works merely presents uncritically what was already known. The approach to a new understanding of Leonardo’s *Treatise on Painting* did not proceed without inner contradiction, not without hesitation. Gault de Saint-Germain’s indecisiveness, for example, is evident in the idea of augmenting Leonardo’s text with passages of his own in order to make the treatise more systematic and more suitable for artistic education.69 The editor felt that his intimate knowledge of Leonardo’s ideas would justify
such a step. The contradiction between a philologically and art historically acceptable edition of the *Trattato* and its adaptation for pedagogical purposes accompanied it throughout the nineteenth century. And in one further point Gault de Saint-Germain falls back on his own demands and on Venturi, remaining trapped in the old myths: in his *Vita* of Leonardo, the artist still dies in the arms of François I.

Notes

This article was translated from the German by Kristin Belkin; unless otherwise noted, the French translations were provided by Linder & Tanguy.

1 In this respect, the writings were not so much about art as about works of art, as for example in the comments on Rubens's Medici gallery, in the explanatory texts to images or in the poems of some writers, as (for example) the collection of poems by Georges Scudery, *Le Cabinet* (1646). On some early texts, or rather text fragments that approach art theoretical issues, see Jacques Thuillier, ‘Textes du XVIIe siècle oubliés ou peu connus concernant les arts,’ *XVIIe Siècle* 35 (no. 138, 1985): 125–40. As one of the first attempts at a French art theory one may count the first publication of Abraham Bosse: *Sentimens sur la distinction des diverses manieres de peinture, dessin et graveure, et des originaux d'avec leurs copies. Ensemble du choix des sujets, et des chemins pour arriver facilement et promptement à bien pourtraire* (Paris, 1649).


5 ‘Si vous voulez retenir sans peine l’air d’un visage, apprenez premierement à bien desseigner plusieurs testes, bouches, yeux, nez, mentons, encolleurs et espaules; et par exemple, les nez sont de dix manières, droits, bossus, cavez, relevez plus haut ou plus bas que le milieu, aquilins, esgaux, plats ou escachez, ronds et aigus: ceux-là sont propres à estre veus de profil. De ceux qui sont veus de front, il s’en trouve d’unze formes differentes, d’esgaux, de gros au milieu, de deliez au milieu, de gros par le bout, et deliez proche des surcils, de deliez par embas et gros par le haut, des narrines larges, d’autres estroitées, de hautes, de basses, des ouvertures retroussées, d’autres rabattuës et couvertes du bout du nez; et ainsi vous trouverez quelques particularitez aux autres
moindres parties, toutes lesquelles il faudra que vous observiez sur le naturel pour les mettre en vostre imagination; ou bien lors que vous aurez à peindre un visage ou quelqu’une de ses parties, portez des tablettes avec vous où vous ayez desseigné de telles remarques et observations, et après avoir jetté une oeillade sur le visage de la personne, vous irez examiner en vostre recueil à quelle sorte de nez ou de bouche celle-là ressemble, et y marquerez legerement quelque signe pour le reconnoistre, et puis estant au logis le mettre en oeuvre.’

Ibid., chap. 190, pp. 62f.


8 See, for example, Leonardo da Vinci, Traité (1651), chap. 187, p. 61: ‘The movements of the parts of the face caused by sudden agitations of the spirit are great in number; the principal ones are laughter, weeping, quarrelling, singing in different tones in high or deep voices, the demonstration of astonishment or admiration, of anger, joy, melancholy, fear, displeasure, the sentiment of sadness and other similar things ... and above all, laughter and weeping, which resemble each other strongly in the features that are imprinted on the mouth, the cheeks, and the eyelids: but they differ only in the eyebrows, and the interval that separates them ...’ (‘Les mouvements des parties du visage causez par les soudaines agitations de l’esprit, sont en grand nombre, dont les principaux sont rire, pleurer, quereller, chanter en differents tons de voix aigus et graves, les demonstrations d’etonnement ou d’admiration, de colere, de joye, de melancholie, de peur, de desplaisir, de sentiment de douleur et d’autres semblables ..., et premierement du rire et du pleurer, qui sont fort semblables dans les caracteres qu’ils impriment sur la bouche, sur les joues, et aux paupieres des yeux: mais ils different seulement dans les surcils, et à l’intervalle qui les separe ....’) Cf. also chap. 257, pp. 83f.

9 Kirchner, L’expression des passions, pp. 46f.

10 In this volume, see also the chapter by J.V. Field.

Optical Themes in Western Art from Brunelleschi to Seurat (New Haven CT and London, 1989), pp. 119-31.

12 Charles-Alphonse Du Fresnoy, L'art de peinture. Traduit en français, enrichi de remarques, et augmenté d'un dialogue sur le coloris (Paris, 1673), article XXIX, p. 39. Having died the year before Le Brun presented his ideas to the academicians in 1668, Du Fresnoy could not have known his treatise.

13 Ibid., article LXVIII, LXIX, p. 76. In several places, Leonardo recommends to the artist to always carry with him a small tablet (tablette) in order to sketch the spontaneous movements of people he observed. Later in the studio these sketches should be worked up with the help of the systematic formula. For the appropriate places in Leonardo's Traité (1651), see chap. 58, p. 15; chap. 95, p. 30; chap. 190, p. 63, and chap. 218, pp. 71f.

14 Du Fresnoy, L'art de peinture, article X, p. 19; the corresponding place in Leonardo da Vinci, Traité (1651), chap. 50, p. 12.


17 On the criticism of the model, see Kirchner, L'expression des passions, pp. 230-47.


21 De Piles, Cours, pp. 165f.

22 Jean-Baptiste Du Bos, Reflexions critiques sur la poesie et sur la peinture. Nouvelle édition revue, corrigée et considérablement augmentée (Paris, 1733), vol. 1, pp. 211f. There we read among other things (p. 211): 'You must, so to speak, be able to copy nature without seeing it. You must be able to accurately imagine its movements in situations you never see it in. Is drawing from a still model having nature before your eyes, when you are supposed to be painting a head that expresses love through a fit of jealousy? You do see an element of nature in your model, but you do not see what is most important about the subject you are painting. You do see a subject that passion must stir, but you do not see him in that passionate state, and it is in this state that you must paint him.' ("Il faut, pour ainsi dire, savoir copier la nature sans la voir. Il faut pouvoir imaginer avec justesse quels sont ses mouvements dans des circonstances où l'on ne la vit jamais. Est-ce avoir la nature devant les yeux que de dessiner d'après un modèle tranquille, lorsqu'il s'agit de peindre une tête où l'on découvre l'amour à travers la fureur de la jalousie? On voit bien une partie de la nature dans son modèle, mais on n'y voit pas ce qu'il y a de plus important par rapport au sujet qu'on peint. On voit bien le sujet que la passion doit
animer, mais on ne le voit point dans l'état où la passion doit le mettre, et c'est dans cet état qu'il faut peindre."


25 The text is reprinted in Mariette, Abecedario, pp. 139–76, here pp. 150f.


28 Caylus’s inventory contains an etching by him after Leonardo’s Last Supper, see Steinitz, Mariette, p. 13.

29 ‘... à représenter l’union de la Divinité avec la forme humaine ...’ Mariette, Abecedario, p. 156.

30 See also Kirchner, *L'expression des passions*, pp. 190–229.

31 ‘On compose ..., ou, pour mieux dire, on groupe, on trouve une figure heureuse et piquante par le développement et la beauté de son contraste, on se détermine à la faire dominante, et c’est d’elle que partent toutes les autres. Cette figure peut être en effet telle qu’elle le paraît pour le mécanisme de l’art, mais son mouvement sera trop fort, ou son repos ne sera pas convenable, enfin la totalité de sa position peut très aisément ne pas convenir au sujet proposé.’ Comte de Caylus, ‘De la composition,’ in idem, *Vies d'artistes du XVIIIe siècle. Discours sur la peinture et la sculpture. Salons de 1751 et de 1753. Lettre à Lagrenée*, ed. André Fontaine (Paris, 1910), pp. 162f.

32 ‘... mais dans son atelier, toujours avec la meme lumiere, toujours sur le même fond ...’ ‘... mais elles [the heads] n’expriment aucune passion, on ne distingue aucune trace de caracteres, ce sont des têtes tout court, qui ont des yeux, un nez, une bouche .... On se croit heureux quand on a fait de jolies femmes; cependant les airs de tête et les formes du visage pourraient convenir à une action toute différente ....’ ‘... que tous ces détails n’ont pas produit un tableau, mais un assemblage plus ou moins étendu de plusieurs parties de la peinture.’ Ibid., pp. 164f.


34 Leonardo had rejected the copying of another artist’s manner because in doing so the artist would remove himself from nature, which should be his only permissible model: Leonardo da Vinci, *Traité* (1651), chap. 24, p. 6.

35 ‘Léonard dessinait ... sans cesse les traits de l’âme, du sentiment et du caractère, mais toujours avec une égale exactitude; il les prononçait pour les retenir ou les retrouver plus aisément. Cet usage si recommandable et auquel j’ose vous exhorer ... est devenu un abus dans la suite, et de ce qui n’était qu’une étude
sérieuse pour arriver à l'expression des passions, on s'en est servi pour la critique et pour la plaisanterie. Peut-être même Léonard en a-t-il fait quelquefois un usage semblable. Mais toujours il résultera de cette étude continuellement répétée un avantage pour le peintre qui dessinera avec soin et dans l'intention de s'instruire.' Comte de Caylus, 'Sur la manière et les moyens de l'éviter,' in idem, *Vies d'artistes*, p. 181.


37 'On évitera avec soin que le choix ne tombe sur des femmes de mauvaises moeurs, et l'on ne se servira pour cet objet d'aucuns mendians, ni autres dont la bassesse dans les habitudes extérieures et dans le caractère du visage les rendront incompatibles avec l'étude des belles formes qui doivent être inséparables de l'expression dans ce Concours.' Articles, rédigés par le Comité du 19 janvier 1760, concernant le Prix pour l'étude des têtes et de l'expression des passions, arrêtés par l'Académie dans l'assemblée du samedi 9 février,' in *Proces-verbaux* (Paris, 1886), vol. 7, p. 119; also in Kirchner, *L'expression des passions*, p. 370.

38 '... le peintre doit remarquer les attitudes et les mouvements des hommes immédiatement après qu'ils viennent d'être produits par quelque accident subit, et il doit les observer sur le champ, et les esquisser sur ses tablettes pour s'en souvenir, et n'attendre pas que par exemple l'acte de pleurer soit contrefait par quelqu'un qui n'aurait point sujet de pleurer, pour en étudier l'expression après ce modèle, parce qu'une telle action n'ayant point une véritable cause, elle ne sera ny prompte ny naturelle, mais il est bien avantageux de l'avoir auparavant remarquée dans le vrai original naturel, et puis faire tenir un modèle en ce même acte pour s'aider un peu l'imagination, et tacher d'y découvrir encore quelque chose qui fasse au sujet, et puis peindre après.' Leonardo da Vinci, *Traité* (1651), chap. 218, pp. 71f; cf. also chap. 57, p. 15. (Translator's note: the phrase 'qui fasse au sujet' in the last sentence makes no sense. Although that part is untranslatable, I have guessed at an interpretation.)


40 Caylus, 'Sur la manière,' pp. 179f.


42 See Kirchner, *L'expression des passions*, pp. 221–4.


45 *Observations en réponse à celles de Mr. Cochin relativement au prix d'expression*, Bibliothèque de l'Ecole Nationale Supérieure des Beaux-Arts, Paris, MS 46, repr. in Kirchner, *L'expression des passions*, pp. 378–81; see also *ibid.*, pp. 224f.

ans passés à l'Académie à dessiner d'après le modèle, les croyez-vous bien employés? ... Toutes ces positions académiques, contraintes, apprêées, arrangées; toutes ces actions froidement et gauchement exprimées par un pauvre diable, et toujours par le même pauvre diable, gагé pour venir trois fois la semaine se désabiller et se faire mannequiner par un professeur, qu'ont-elles de commun avec les positions et les actions de la nature? Qu'ont de commun l'homme qui tire de l'eau dans le puits de votre cour, et celui qui, n'ayant pas le même fardeau à tirer, simule gauchement cette action, avec ses deux bras en haut, sur l'estrade de l'école? Qu'a de commun celui qui fait semblant de se mourir là, avec celui qui expire dans son lit, ou qu'on assomme dans la rue? Qu'a de commun ce lutteur d'école avec celui de mon carrefour? Cet homme qui implore, qui prie, qui dort, qui réfléchit, qui s'évanouit à discrétion, qu'a-t-il de commun avec le paysan étendu de fatigue sur la terre, avec le philosophe qui médite au coin de son feu, avec l'homme étouffé qui s'évanouit dans la foule? Rien, mon ami, rien.' Denis Diderot, 'Essai sur la peinture, pour faire suite au salon de 1765,' in *idem, Oeuvres complètes*, ed. Jules Assézat and Maurice Tournouex (Paris, 1876), vol. 10, pp. 464f.


55 On Leonardo's manuscripts and their history, see Kate Trauman Steinitz, *Manuscripts of Leonardo da Vinci. Their History, with a Description of the Manuscript Editions in Facsimile* (Los Angeles, 1948).

56 Twelve volumes were in the Institut National des Sciences et des Arts, one volume in the Bibliothèque Nationale.

57 '... à continuer ce travail utile pour l'Histoire de l'Esprit humaine ....' Thus the entry in the protocol of the session on 6 Floréal of the year V, cited after Giovanni Battista Venturi, *Essai sur les ouvrages physico-mathématiques de Léonard de Vinci, avec des fragments tirés de ses manuscrits apportés de l'Italie* (Paris, An V (1797)), p. 56.

58 'Il faut ... placer Léonard à la tête de ceux qui se sont occupés des sciences Physico-Mathématiques et de la vraie méthode d'étudier parmi les Modernes. C'est dommage qu'il n'ait pas publié de son temps ses vues; les hommes d'esprit se tournèrent alors du côté des beaux-arts, le commun des savans continua à se trainer dans les disputes scholastiques ou religieuses, et l'épopée de la vraie interprétation de la nature fut retardée d'un siècle.' *Ibid.*, p. 5.

59 'Les écrits d'un homme qui, à la renaissance des lettres, a été un des premiers à s'élancer dans la carrière des sciences exactes en Europe, ne devraient être confiés qu'à une assemblée de Savans du premier ordre, qui en peuvent apprécier le mérite mieux que personne, et qui loin de cacher leurs trésors, s'emploient d'en faire part à ceux qui désirent y puiser.' *Ibid.*, p. 3.

60 Giovanni Battista Venturi, 'Fragments tirés des manuscrits de Léonard de Vinci, traduits de l'Italien, avec des notes du traducteur,' in *idem, Essai*, pp. 7–32.

62 ‘Le Traité de la Peinture que nous avons de Vinci, n’est qu’une compilation de divers fragments tirés de ses manuscrits. Il étoit à la bibliothèque Barbarini à Rome en 1630; le Cav. del Pozzo en obtint copie, et le Poussin en dessina les figures en 1640. Cette copie et une autre tirée de la même source, chez Thevenot, servirent de base à l’édition donnée en 1651, par Raphael du Fréne. … du Fréne avoue que cette compilation est imparfaite à plusieurs égards, et mal ordonnée. Il l’est, parce que le compilateur n’a pas saisi l’esprit méthodique de Vinci, et qu’on y a méli des pièces qui appartiennent à d’autres traités; d’ailleurs on n’a pas vu, ou l’on a négligé plusieurs autres chapitres qui devroient en faire partie. Par exemple, La comparaison de la Peinture avec la Sculpture, qu’on a annoncée comme un traité séparé du même Auteur, n’est qu’un chapitre appartenant au Traité de la peinture. Tout cela sera complété et mis en ordre dans le Traité d’Optique.’ Ibid., pp. 42f.

63 Ibid., p. 39.


68 H 228.

69 Gault de Saint-Germain, Préface, p. xv.