LEONARDO DA VINCI

UNESCO TRAVELLING PRINT EXHIBITION

LEONARDO DA VINCI

Exhibition A

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This exhibition of reproductions of the drawings of Leonardo da Vinci has been assembled for circulation in cultural and educational institutions throughout the Member States of Unesco.

It forms part of Unesco's programme of encouraging a greater understanding of art and it is particularly fortunate that it has been possible to inaugurate the exhibition during 1952 and thus celebrate the five hundredth anniversary of the great master's birth.

The prints have been chosen from the original collection made by Adolfo Venturi for the publication on Leonardo da Vinci produced by the Commissione Vinciana and printed by la Libreria

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T EONARDO DA VINCI was born 500 years ago near the little town of that name L not many miles from Florence. The event was to exercise the profoundest influence on the development of art in Europe and indeed in the world. It is appropriate therefore that a world-wide organization should mark such an anniversary and that the country of his birth, the country where he ended his days as well as various other countries have organized individual tributes to his genius on this anniversary. But this genius, recognized as universal, demands the homage of a celebration as nearly universal as the circumstances of the world today admit.

Leonardo's universality makes it impossible for any single person to present a comprehensive picture of his genius. It is difficult enough to assess his achievement as an artist-the most that can be attempted here-for in Leonardo the distinctive function of eye and brain are more closely and more obviously interwoven than in any other great European artist. It is impossible to think of him only as a painter, as the selection of drawings catalogued below emphatically demonstrates. He is the type par excellence of the intellectual artist; one might almost say the reductio ad absurdum of that type, so far away from his actual purpose, that is the production of paintings, did these very researches carry him: so often in fact did they defeat their avowed object. This distracting curiosity increased with the years, so that towards the end his drawings almost ceased to fulfil their normal function, as a sort of scaffolding by the aid of which paintings are produced, and became part of the paraphernalia of scientific research. They did not as a result become merely diagrammatic, for Leonardo was endowed with an extraordinary feeling for the beauty of line and texture. However factual his object in putting something on paper might be, unconsciously and inevitably some element of beauty, some exquisite rhythm crept into his statement.

A contemporary's reaction to his methods is reflected in a story told of him by Vasari: Upon being commissioned by the Pope to secure a work, it is said that Leonardo began immediately to distil oils and herbs to make a varnish, whereupon Pope Leo exclaimed "Alas! he will never do anything, for he begins by thinking of the end of the work before the beginning".

This must have been in about 1513, when Leonardo was 60. What this projected painting was we are not informed, but we can assume that it was never completed.

Some 10 years earlier the artist had begun work on a composition of Leda,

the swan, and the two sets of twins hatched out of the eggs resulting from this union. The work must have been carried at least as far as the cartoon but, if Leonardo ever finished a painting of it, this does not survive and we know it only from his drawings and from copies made by pupils. We can, however, to a certain extent follow the master at work on it. Leda seems to have gone through various stages from an exaggeratedly twisted figure kneeling on one knee to a standing figure in less violent pose. But it is the accessories of the design which are most revealing of Leonardo's methods of work. The problem of how human babies would be hatched from eggs confronted him to begin with. Instead of shirking this problem as an ordinary painter might have done, Leonardo seems to have thought it essential to find out the appearance of the human fœtus in the womb, so that he might with the maximum verisimilitude adapt the process of parturition to an egg. This led to a whole series of enquiries into human generation, a whole series of notes and drawings.

The scene was represented in a luxuriant landscape with plants in the foreground. For this Leonardo made an intensified study of plant life from which resulted some of his most beautiful drawings of flowers and grasses, examples of which find a place in this exhibition. Another problem arose, that of Leda's coiffure, and a further series of drawings was produced of elaborately plaited wigs, which may also have had some relation to the design of costumes for masques. The configuration of running water, its eddies and meanders, engrossed Leonardo almost from the first. At one moment this problem seems to have been connected in his mind with the configuration of human hair, and Leda's coiffure may have been also the occasion of a renewed and intensified study of water. With Leonardo nothing was irrelevant and every aspect of the physical world was a challenge to further research.

I do not, however, wish to convey the impression that Leonardo never completed any of his undertakings. By this time, about 1506, he had behind him at least two momentous achievements, the *Virgin of the Rocks* and the *Last Supper*. The first had given to the world a new system of light and shade; in the second the ideal of the High Renaissance was for the first time completely realized and the whole subsequent development of painting is unthinkable without it.

But the visitor to this exhibition will need some more precise information about Leonardo's life and works. The artist was born in 1452 on 15 April, the illegitimate son of a notary and a peasant woman, Caterina. In 1469 he came with his father to Florence and was subsequently apprenticed to Andrea del Verrocchio the leading sculptor and goldsmith of the city—he was still in Verrocchio's workshop in 1476. Though Verrocchio was primarily a goldsmith and a sculptor he also practised as a painter and, the story goes, only gave up painting when he realized that he was going to be outshone by his pupil. Leonardo was enrolled as a painter in the Guild of St. Luke in Florence in 1472 and obviously soon gained a considerable reputation. In 1478 he was in fact, commissioned by the Signoria, the Government of Florence, to paint an altarpiece for the Chapel of S. Bernardino in the Palazzo Vecchio. We hear no more of this picture and whether it was ever begun by Leonardo is a matter of surmise.

Three years later, in 1481, he received another important commission to paint an altarpiece for the monks of S. Donato a Scopeto. This is almost certainly the unfinished painting of the *Adoration of the Magi*, now in the

Uffizi Gallery at Florence. The enthusiasm with which Leonardo embarked on this work is shown by the number and variety of the studies which he made for it. It was obviously for him a problem of the deepest significance: in it he felt he was to express this solemn mystery in a language until then unknown. The theme as Leonardo saw it in his mind's eye, a microcosm of human life as well as a religious mystery, was perhaps beyond human realization. Yet, in spite of the fact that it was never completed, the work was a revolution in picture making. Instead of confining himself to the conventional representation of the three kings adoring the newly-born infant, he added comments on life in general and a sort of pattern book of human and equine behaviour in the background. It was at this time that the horse as a structure first began to interest him, and numerous studies of horses can be connected with the Adoration of the Kings. This unfinished work remains the first complete expression of the Italian High Renaissance and profoundly influenced the great artists of the next generation, Raphael in particular.

But this documented work is by no means Leonardo's only achievement during the period. A number of other paintings must on stylistic grounds be assigned a place here, and a number of drawings in preparation for works which were either never carried out as paintings or which have perished. To the first category belong the large Verrocchiesque painting of the Annunciation, now in the Uffizi at Florence, the Benois and Litta Madonnas, in the Hermitage at Leningrad, and the Portrait of a Lady in the Lichtenstein collection; to the latter a composition of the Virgin and Child with a Cat, for which

numerous drawings exist of which examples are exhibited here.

We do not know the reasons why Leonardo left Florence for Milan between 1481 and 1483. It may have been simply the prospect of lucrative employment and more scope than was to be found in Florence, but a feeling of frustration over his failure to complete the Adoration of the Kings may also have been partly the cause. The draft of a letter is preserved, intended no doubt for Lodovico Sforza, Duke of Milan, in which the artist sets out the astonishing list of his qualifications for employment. He describes himself as a military engineer, an architect, a sculptor and a painter—and this order no doubt reflects his opinion of their relative importance. Our first precise information about him in Milan is the contract which he signed, in association with the Milanese painters Evangolista and Ambrogio Prada, to paint a picture for the Confraternity of the Conception, identifiable as the painting of the Virgin of the Rocks now in the National Gallery, London. (The problem of the relation between this panel and the undoubtedly original replica of the composition in the Louvre in Paris is one of the outstanding mysteries in the history of art and a problem which cannot be discussed here.)

Not until 1489 is a commission for an equestrian statue of Francesco, father of the reigning Duke of Milan, Lodovico Sforza, first spoken of, though it may well have been one of the principal reasons for Leonardo's being invited to Milan. By 1483 a clay model of this monument had been completed; it was never cast in bronze, as had been intended, and was destroyed

not long afterwards.

It continued for many years to occupy Leonardo's mind and led to a resumption of his studies of the anatomy of the horse begun in connexion with the *Adoration of the Magi*. Indeed there has been much uncertainty as to whether the numerous drawings of horses which have come down to us, were made in preparation for the last-named composition, for the "Cavallo"

as it is referred to by Leonardo himself, for the *Battle of Anghiari* of 1503-4, or for a still later work—a projected monument to Gian Giacomo Trivulzio who became governor of Milan in company with Gaston de Foix in 1511.

But the catalogue of Leonardo's work in Milan must be resumed. In 1407 he was at work on what has generally been regarded as his greatest achievement, the Last Supper painted in fresco (or rather in a disastrous compromise between oil and fresco) in the refectory of the convent of Sta. Maria delle Grazie, Milan. Though this survives it is only as a shadow of what it must originally have been. Leonardo's passion for experiment induced him to attempt a new technique; this and the dampness of the wall led to its deterioration even during Leonardo's life-time. Only as a composition can we judge it today. At the moment of its completion, when the expression had not yet faded or peeled off the faces of the apostles, it must have been singularly arresting as a strikingly original re-statement of a central Christian dogma and as the perfectly balanced solution of a problem in composition. Today, when its individual beauties have been effaced and the originality can only be grasped by the exercise of a strong historical imagination, it has become for us-hackneyed. It still arouses in us respect and reverence, but not excitement.

Painting and sculpture were not however, the only reasons, for Leonardo's employment in Milan. Evidence of his other activities there as an architect, as a designer of costumes for masques, and as a military engineer is provided by the drawings. There is for example a series of finished drawings, more or less uniform in size and technique, which illustrate various military inventions and must date from about 1483-85, not long after his arrival in Milan.

Leonardo's employment in Milan came to an end as the result of circumstances beyond his control. In 1499 the French troops of Louis XII occupied the city and expelled Lodovico Sforza. Leonardo fled first to Venice and then to Florence. After a time in the service of Cesare Borgia as military engineer in the Romagna, he returned to Florence and by October 1503 was at work on an important commission entrusted to him by the Florentine State. This was to decorate one wall of the great chamber of the Palazzo Vecchio. Michelangelo, then 28 years of age, was to paint the opposite wall. The subjects chosen were illustrations of the warlike history of the Florentine Republic and the scheme was designed as a glorification of the republican ideals and achievements. Leonardo's subject was a cavalry battle and again the horse, this time in violent action, was its central theme, while Michelangelo adapted the subject allotted to him, so as to display the mastery of his drawing of the human figure. Only part of the Battle of Anghiari, the subject of Leonardo's fresco, was ever completed; this part, as well as the cartoon, has perished. Later copies enable us to form some idea of the composition as a whole; a number of drawings by the master himself, ranging from slight thumbnail sketches to elaborate studies of heads and horses, enable us to piece together the elements of the design.

Though the most important of his productions in Florence, the Battle of Anghiari was not the only one. We have, dating from as early as 1501 an eyewitness's account of a cartoon of the Virgin and Child with St. Anne, which was on exhibition in Florence and attracted crowds of admirers. This particular cartoon no longer exists, but Leonardo went on developing the composition and evolved a second cartoon, that of the Virgin and Child with St. Anne now in the Royal Academy, London (a necessarily very reduced reproduction

of this is included in this exhibition) and finally a painting now in the Louvre. Studies for one or other of these three compositions have come down to us and some of these are also shown.

In 1506 Leonardo, the Battle of Anghiari still unfinished, was allowed by the Florentine Government to accept the invitation of Charles d'Amboise, the French governor of Milan, to return to that city. Between that date and 1513 he was partly in Milan but more often in Florence. At the end of 1513 he went to Rome, no doubt in the hope of obtaining congenial employment from the art-loving Pope Leo X, a fellow Florentine, and he remained there until 1516. But by this time Leonardo's style, once in the forefront, had become antiquated in the eyes of his contemporaries. Michelangelo had by then completed the ceiling of the Sixtine Chapel and Raphael was at work on the Stanze of the Vatican. It was perhaps rather as an engineer that the ageing artist came to Rome: at least there is evidence of his having put forward schemes for draining the Pontine Marshes, an achievement which was not realized till more than 500 years later. Leonardo was in Rome as late as August 1516, but by the end of May or the beginning of June of the following year he is recorded as living near Amboise in France. Some years earlier, in 1507, he had been appointed Peintre et ingénieur ordinaire to Louis XII, King of France. Whether this appointment carried with it a residential obligation or whether Leonardo forfeited the post by not taking it up is not clear. The offer must have been renewed or the appointment ratified by Louis's successor, Francis I. In any case Leonardo remained in France until his death, which occurred on 2 May 1519, at the Castle of Cloux, near Amboise.

These, in brief, are the documented data of Leonardo's career. Into this framework have been fitted some of those essential but so often undated documents of an artist, his paintings. In the absence of reproductions of these paintings it was necessary that the visitor should be made acquainted with the works to which so many of the drawings here shown can be related and thus be able to form some idea of the development of Leonardo's art. The drawings, even the small selection here shown, give this with remarkable completeness: their total number, even without the diagrams and illustrations in the manuscripts, is very large-larger than in the case of any other Italian artist of the fifteenth century. Their preservation may have been the result of various causes. Leonardo, in spite of the wanderings of his later years, was clearly by nature a hoarder. He was obviously sensible of the value of his own work and thought that at some time, always receding further into the future, these drawings might again be of practical value to him. He left what must have been a vast accumulation of drawings and manuscripts to a favourite pupil, Francesco Melzi, of a noble Milanese family, who had accompanied him to France. The material remained in the Melzi family at their villa near Milan and gradually its interest and value were forgotten, so that most of it was purloined. Much was acquired towards the end of the sixteenth century by the Milanese sculptor, Pompeo Leoni, who arranged and mounted it in albums. One of these was bought after Leoni's death by Galleazzo Arconati, who presented it to the Ambrosian Library in Milan in 1636 where it remains. But the contents of this album, lettered by Leoni on the binding as Machines and Secret Arts, are mainly technical and do not concern us here. A second album left by Leoni in Spain, was bought for the great collector Thomas Howard, Earl of Arundel, and found its way to England. Its history after the Earl's death is still obscure, but by the last years of the seventeenth century it was in the English Royal collection. The contents of this album, still preserved in the Royal Library at Windsor Castle, form the greatest single collection of artist's, as opposed to mechanical or scientific, drawings by Leonardo in existence. More than two-thirds of the present exhibition is drawn from this source. Most, though by no means all, of the Windsor drawings date from Leonardo's later years. The greater part of the comparatively less numerous drawings of his first Florentine period are widely scattered and are to be found in all the great European collections—in the Louvre in Paris, the British Museum in London and the Uffizi in Florence as well as in some smaller private collections in Europe and America.

Leonardo employed every technique known to the draughtsman of his day and even invented a new one, pastel, if we are to believe Lomazzo, a writer of the sixteenth century. The appearance of his drawings, apart from changes in style, differs widely according to the medium in which they are executed. In his first Florentine period he seems mainly to have used pen and ink for ordinary sketches, but for studies of detail-heads, hands, drapery and horses-metal point on coloured, often brightly coloured grounds, was preferred. He continued to use this elaborate medium in Milan, but less and less frequently, and black and red chalk, hitherto exceptional, began to be regularly employed. It is, of course, impossible in a few words to analyse the changes which took place at various times in the media he employed or the manner in which he employed them. One can only say that Leonardo's drawings as he grew older had a tendency to become more atmospheric and one feels certain that such a drawing as the famous Woman Pointing at Windsor Castle, must belong to a late period in his career. One thing about Leonardo however is absolutely constant, his left-handedness. Not only did he consistently write from right to left, but in his drawings the strokes of the pen or chalk always slope from left to right, not, as with a right-handed draughtsman, from right to left. This peculiarity facilitates the work of the connoisseur and it is rare that any doubt arises as to the authenticity of a drawing from Leonardo's hand.

The subjects of his drawings are as various as his interests. Apart from the studies made for his paintings and sculpture, the early *Madonnas* and *Adorations*, the Sforza and Trivulzio monuments, the *Last Supper*, the *Battle of Anghiari*, the *Leda* and the *Virgin and Child with St. Anne*, there are two types of drawings peculiar to him which call for some comment, the caricatures and the "Deluges".

The former, which enjoyed a wide popularity for three centuries after his death, must have been the expression of some curious psychological kink in his nature. His beauty as a young man became a legend in Florence and from early in his career in many of his drawings the profile of a beautiful youth, perhaps typifying himself, confronts that of a sinister old man. The contrast between youth and age was no doubt of particular significance and ever present to his mind, and the contrasted types continue to appear almost to the end of his career. But while the type of youth varies only slightly, modified in accordance with the appearance of successive favourites, that of the old man develops and multiplies to become a veritable gallery of male, and occasionally female, deformity of feature. This inherent interest in the grotesque was perhaps stimulated by studies in anatomy and the caricatures,

even at their most extravagant, always retain the structure of humanity. The "Deluges" present us with quite another aspect of Leonardo's peculiar character, though here again there is something almost morbid in his absorption in them. The appearance of water had fascinated him as a youth, but fear was combined with fascination. He studied hydraulics as no man before

him had done and strove to master the secrets of water, yet he never lost this terror of its uncontrollable force.

Visions of a catastrophic flood bringing the world to an end haunted his imagination and found expression, in his later years, in the extraordinary series of impressions of this terrific unleashing of the forces of nature.

The reproductions of drawings in this exhibition have been arranged in four groups, partly according to their subject-matter, the order within these groups being roughly chronological. The first group of the first Florentine period (with the exception of the self-portrait of Leonardo late in life) contains studies for Madonna compositions and for the Adoration of the Magi and the related works, including studies of horses and animals for these compositions. The second group includes studies and portraits of women, designs for masques and, forming the largest series, detail drawings for the versions of the Virgin and Child with St. Anne. In the third group are the studies for other famous works of Leonardo's maturity, the Last Supper, the Sforza and Trivulzio monuments and the Battle of Anghiari, with a number of drawings of horses: drawings made in connexion with studies in anatomy and proportion and finally the series of catastrophes and deluges. The fourth group comprises a selection from the allegorical and satirical drawings and from the caricatures; drawings of some of Leonardo's inventions as a military engineer, some miscellaneous drawings and finally the drawings of rock formations, of landscapes, of maps and of plants. However, where two or more reproductions are mounted together on one sheet, these are not invariably of similar subject or date; the arrangement adopted in principle cannot therefore be followed consistently.

A. E. POPHAM.

GROUP I

	Ι.	CCLXXXXII	Self-portrait of Leonardo da Vinci as an Elderly Man. Ex-Royal Library, Turin.
	2:	XXIV	Virgin and Child with a Cat. Uffizi, Florence. One of a series of studies for a composition of this subject, on which Leonardo was working about 1478-80.
	3.	XXIII	Virgin and Child with a Cat. British Museum, London. One of a series of studies for a composition of this subject, on which Leonardo was working about 1478-80.
	4.	XXXI	Virgin and Child with a Bowl of Fruit. Louvre, Paris. Apparently a study for the "Benois" Madonna in the Hermitage, Leningrad, dating from about 1478-80.
	5.	XVIII	Two Studies of the Virgin and Child and a Cat and Three Studies of the Child alone. British Museum, London. One of the series of studies for a composition of this subject, on which Leonardo was working about 1478-80.
	6.	XIV	Study of the Drapery of a Figure Kneeling to the Left. Royal Library, Windsor Castle. The purpose of this study, dating probably from about 1485-95, is not known.
1	7.	XLVI	Composition Sketch of the Adoration of the Kings, Louvre, Paris. Study for the painting of the subject in the Uffizi at Florence, which is almost certainly the picture commissioned by the monks of S. Donato a Scopeto, Florence, in 1481.
	8,	LVI	Figure at a Table, Two Figures Conversing and other Studies. Louvre, Paris. Possibly studies for the background figures in the Adoration of the Kings of 1481 in the Uffizi, Florence. The figures at a table, however, suggest a composition of the Last Supper.
1	9.	XLV	Sketch for an Adoration of the Shepherds and Separate Study of a Shepherd. Musée Bonnat, Bayonne.

The roman numerals in this catalogue are those given to the drawings in the Commissione Vinciana publication The Manuscripts and Drawings of Leonardo da Vinci and are quoted here for identification purposes.

The Adoration of the Kings of 1481 in the Uffizi, Florence, may have been evolved from an earlier composition of the Adoration of the Shepherds represented in this and other sketches. IO. LIX Man Blowing a Trumpet into the Ear of Another and Two Figures in Conversation. British Museum, London. Generally regarded as studies for the background figures of the Adoration of the Kings, of 1481, the two groups may however have an allegorical meaning. I. Study for an Adoration of the Shepherds. Accademia, Venice. II. XLIII II. Studies for an Adoration of the Shepherds. Accademia, Venice. The Adoration of the Kings of 1481 in the Uffizi, Florence, may have been evolved from an earlier composition of the Adoration of the Shepherds represented in this and other sketches. Studies of the Virgin Adoring the Infant Christ. Metropolitan Museum, 12. XL New York. Studies for a composition which seems to be connected with the Virgin of the Rocks and probably preceded it. Perspective Study for the Background of the Adoration of the Kings. XLVII 13. Louvre, Paris. For the painting of 1481 in the Uffizi, Florence. I. Study of a Rearing Horse. Royal Library, Windsor Castle. 14. LV II. Study of a Rearing Horse. Royal Library, Windsor Castle. Apparently studies for horses in the Battle of Anghiari, 1503-4. 15. LXVII Horseman. Collection of Mr. John Nicholas Brown, Newport, Probably for the background of the Adoration of the Kings of 1481 in the Uffizi, Florence. 16. LXVI I. Rider on a Galloping Horse. Accademia, Venice. II. Rider on a Galloping Horse. Collection of Captain Norman Colville. Both drawings are probably studies for background figures in the Adoration of the Kings of 1481 in the Uffizi, Florence. 17. CXXI Studies of Horses and of Horses' Heads. Royal Library, Windsor Probably made in connexion with the Adoration of the Kings of 1481, in the Uffizi, Florence. Studies of Parts of Horses. Royal Library, Windsor Castle. 18. CXXIV Probably made in connexion with the Adoration of the Kings of 1481, in the Uffizi, Florence. GROUP II

Profiles of Men, Youths and Girls. Royal Library, Windsor Castle.

The drawings must date from Leonardo's first Florentine period,

about 1478, but the type of profile, here occurring for the first

time, is to be found in sketches throughout his life.

I. Woman's Hands. Royal Library, Windsor Castle. 20. CCII. Possibly a study for the hands in the portrait of a lady in the Lichtenstein Collection [Ginevra de' Bonci (?)] dating from Leonardo's first Florentine period. The picture has been cut down and now includes the head and bust only but there is evidence that it originally showed the hands approximately in this position. II. Fantastic Battle with an Elephant. Royal Library, Windsor Castle. Dating probably from about 1511, this drawing seems on the one hand to be a sort of fantastic reminiscence of the Battle of Anghiari and on the other to be connected with the apocalyptic visions of destruction. Seated Nude Man and Child with a Lamb. Royal Library, CCXXXXIII Windsor Castle. II. Three Studies of a Child with a Lamb. Formerly Grand Ducal Collection, Weimar. IH. Study of a Child. Royal Library, Windsor Castle. IV. Studies of the Virgin and Child. Royal Library, Windsor Nos. I, II and III contain studies of the Infant Christ with a Lamb, which may be connected with one of the compositions of the Virgin and Child with St. Anne. No. IV is by Leonardo's pupil, Cesare da Sesto, though it may be based on a sketch by the master. Head of a Girl. Ex-Royal Library, Turin. 22. LXXXVI Apparently a study for the head of the angel in one of the two versions of the Virgin of the Rocks (1483 or earlier). XCV Profile Head of a Woman Looking Down to the Left. Louvre, Paris. 23. Study for the head of the Virgin in a composition of the Virgin and Child known as the Madonna Litta in the Hermitage at Leningrad. It dates from Leonardo's first Florentine period. Portrait of Isabella d'Este, Duchess of Mantua. Louvre, Paris. 24. CCXXXIII Probably dating from 1499, when Leonardo passed through Mantua on his way from Milan to Venice. CIV Study of a Winged Woman, Allegory with Fortune, British Museum, 25 London. Probably dating from Leonardo's early Florentine period or from the beginning of his stay in Milan, 1481-83. 26. Women Dancing. Accademia, Venice. LXXXIX Probably dating from about 1504-8. Woman Pointing. Royal Library, Windsor Castle. 27. XC Possibly the study for a costume in a masque and dating from about 1513. 28. CLXXXVII Youth with a Lance. Royal Library, Windsor Castle. One of a series of designs for costumes in a masque, perhaps dating from about 1511.

29.

CCVI

Studies of a Woman's Coiffure. Royal Library, Windsor Castle.

the Swan, known from copies by pupils of Leonardo.

Similar hairdressing is to be found in the composition of Leda and

19.

XLIX

I. Study of a Woman's Head. Metropolitan Museum, New York. Corresponds with the head of the Virgin in the painting of the Virgin and Child with St. Anne in the Louvre.

II. Composition Study for the Virgin and Child with St. Anne, Accademia, Venice.

Represents an early stage in the composition, probably about 1503.

CCXXXIX

Composition Sketches for the Virgin and Child with St. Anne. British Museum, London.

For the version of the composition represented by the cartoon in the Royal Academy, London.

II. Composition Sketch for the Virgin and Child with St. Anne. Louvre,

Represents some stage in the preparation of the cartoon of the subject in the Royal Academy, London.

CCXXXV

I. Studies of a Nude Man, of Architecture and Writing. Royal Library, Windsor Castle.

The figure is a free version of Michelangelo's statue of David, and was probably made in connexion with the composition of Neptune Driving his Sea-horses drawn for Antonio Segni. Leonardo was one of a Committee summoned in 1503 by the Government of Florence to decide where this statue should be set up and the drawing no doubt dates from about this time.

II. Profile of an Old Man. British Museum, London.

The head is on the back of the sheet with composition studies for the Virgin and Child with St. Anne.

CCXXXVII

- I. Head of a Woman Looking Down to the Right. Royal Library, Windsor Castle.
- II. Head of a Woman Turned Three-quarters to the Left. Royal Library, Windsor Castle.

No. I is a study for the head of St. Anne in the Louvre painting of the Virgin and Child with St. Anne, No. II may be a study for her head in some other composition of the same subject.

CCXXXX 34.

- I. Drapery Study. Royal Library, Windsor Castle.
- II. Drapery Study. Royal Library, Windsor Castle. III. Drapery Study. Royal Library, Windsor Castle.

IV. Drapery Study. Royal Library, Windsor Castle.

All four drawings are studies for details of drapery in the Louvre painting of the Virgin and Child with St. Anne.

CCXXXXI

- I. Drapery Study. Royal Library, Windsor Castle. II. Drapery Study. Royal Library, Windsor Castle.
- III. Arm and Sleeve. Royal Library, Windsor Castle.

All three drawings are studies for details of drapery in the Louvre painting of the Virgin and Child with St. Anne.

IV. Body and Arms of a Child. Royal Library, Windsor Castle. Study for the Infant Christ in the same painting.

CCXXXVI

The Virgin and Child with St. Anne. Royal Academy, London. Cartoon for a painting (differing) from the picture in the Louvre. which Leonardo never apparently carried further. It constitutes an earlier version.

- Hanged Corpse of Bernardo Baroncelli. Musée Bonnat, Bayonne. 37. XXXVII Baroncelli was executed on 29 December 1479.
- CLXXXXVIII Study for the Last Supper and Mathematical Figures and Calculations. Royal Library, Windsor Castle. Early sketch for the fresco in the Refectory of Sta. Maria delle Grazie, Milan, printed by Leonardo about 1495-97.
- CC -Head of an Apostle. Royal Library, Windsor Castle. 39. II. Head of an Apostle and Study of Architecture. Royal Library, Windsor Castle. No. I is for the head of St. Philip and No. II for that of St. James the Greater in the Last Supper.
- CLXVI Study of a Horse. Royal Library, Windsor Castle. Five Studies of Horses and Riders. Royal Library, Windsor Both sheets are for the Trivulzio monument and date from about 1508-11.
- I. Horseman Trampling on a Fallen Foe. Royal Library, Windsor CCLXXVI Study for an Equestrian Statue and its Base. Royal Library, Windsor Castle. No. I is a study for the Sforza monument, No. II for the Trivulzio monument.
- I. Study of a Horse. Royal Library, Windsor Castle. CCLXXVII II. Study of a Horseman. Royal Library, Windsor Castle. Both drawings appear to be studies for the Trivulzio monument, 1508-11.
- CCLXXV Study for an Equestrian Statue and its Base. Royal Library, Windsor Castle. II. Studies for an Equestrian Statue and its Base. Royal Library, Windsor Castle. Both drawings appear to be studies for the Trivulzio monument, 1508-11.
- I. Study of an Angel, of Horsemen and Horses and of Machinery. CCLV Royal Library, Windsor Castle. II. Studies of a Man Despatching his Foe. Accademia, Venice. The horsemen and horses on No. I and the three groups on No. II are for the Battle of Anghiari.
- Horses and Horsemen in Combat. Royal Library, Windsor CCL 45. II. Horsemen with Pennants Advancing from the Left. Royal Library, Windsor Castle. Both sheets of studies are for the Battle of Anghiari, 1503-4.

46.	CCLVII	Profile of a Man and Studies of Horsemen. Royal Library, Windsor Castle. The horsemen are probably for the Battle of Anghiari, 1503-4 but the head and the writing are of earlier date.
47.	CCLII	 I. Galloping Horsemen and other Figures. Royal Library, Windsor Castle. Apparently studies for the Battle of Anghiari, 1503-4. II. Volcanic Eruption among Rocks: Uprooted Tree and Figures. Royal Library, Windsor Castle. These drawings are connected with Leonardo's studies of floods and cataclysms.
48.	CCLVIII	 Head of a Bald Man Shouting. Museum of Fine Arts, Budapest. Head of a Youth in Profile. Museum of Fine Arts, Budapest. Both heads are for the principal groups in the Battle of Anghiari, 1503-4.
49.	CCLVI	 Battle of Horsemen and Footsoldiers. Accademia, Venice. Two Groups of Horsemen Fighting. Accademia, Venice. Studies of Horsemen. British Museum, London. Studies of Horsemen Fighting and of Footsoldiers. Accademia, Venice. All four drawings are studies for the Battle of Anghiari, 1503-4.
50.	CCLIII	Deluge. Royal Library, Windsor Castle. One of a series of apocalyptic visions of destruction, generally by water, which Leonardo produced during the last years of his life.
51.	CCLXVI	Destruction Rained from Heaven on the Earth. Royal Library, Windsor Castle. One of a series of apocalyptic visions of destruction, generally by water, which Leonardo produced during the last years of his life.
52.	CCLXII	 I. Deluge. Royal Library, Windsor Castle. II. Deluge. Royal Library, Windsor Castle. From the series of apocalyptic visions of destruction, generally by water, which Leonardo produced during the last years of his life.
53.	CCLXI	I. Waterfall and Crashing Rocks. Royal Library, Windsor Castle. II. Deluge. Royal Library, Windsor Castle. From the series of apocalyptic visions of destruction, generally by water, which Leonardo produced during the last years of his life.
54.	CCLIX	 I. Cloudburst. Royal Library, Windsor Castle. II. Deluge. From the series of apocalyptic visions of destruction, generally by water, which Leonardo produced during the last years of his life.
55.	CCLX	 I. Deluge. Royal Library, Windsor Castle. II. Cloudburst. Royal Library, Windsor Castle From the series of apocalyptic visions of destruction, generally by water, which Leonardo produced during the last years of his life.
56. 16	CCIV	 I. Head and Shoulders of a Bearded Man. Notes and Ornaments. Royal Library, Windsor Castle. II. Study for an Apostle. Fodor Museum, Amsterdam.

57-	CCLXXXXI	 I. Man. Royal Library, Windsor Castle. II. Nude Man. Royal Library, Windsor Castle. III. Nude Man. Royal Library, Windsor Castle. IV. Horse and Rider. Royal Library, Windsor Castle. V. An Old Man Seated and Studies of Swirling Water. Royal Library, Windsor Castle. The old man in No. V has been regarded as a portrait of himself by Leonardo, contemplating the swirling water, which had so great an interest for him.
58.	CCLXXIX	Neptune Driving his Sea-horses. Royal Library, Windsor Castle. The drawing, dating from about 1503-4, is probably connected with a design of the subject which Leonardo made for his friend
59-	CCLXXXVI	Antonio Segni. Profile of a Man Squared for Proportion. Accademia, Venice. The drawing, dating from about 1485-90, illustrates Leonardo's studies in the proportion of the human figure.
60.	CCLXXXI	 I. Four Studies of a Man's Leg. Royal Library, Windsor Castle. II. Two Studies of a Man's Left Leg. Royal Library, Windsor Castle. III. A Man's Right Leg. Royal Library, Windsor Castle. IV. Studies of the Lower Half of a Man and of Machinery. Royal Library, Windsor Castle. The drawings illustrate Leonardo's interest in anatomy.
61.	ČCLXXX	 Studies of a Nude Man and a Small Sketch of Men Fighting. Royal Library, Windsor Castle. Studies of a Man Climbing and of Anatomy. Royal Library, Windsor Castle. Studies of a Man seen from the Back and from the Side. Royal Library, Windsor Castle.
		 IV. Study of a Man with his Left Hand on his Hip. Royal Library, Windsor Castle. The small sketch of men fighting on No. I was probably made in connexion with the Battle of Anghiari, about 1503-4. The studies of nude men on Nos. III and IV are earlier and probably date from about 1490-91.
		GROUP IV
62.	СП	An Allegory. Library of Christ Church, Oxford. The allegory appears to relate to Milan under Lodovico Sforza and to date from about 1483-85.
63.	CVII	The Ermine as a Symbol of Purity. Collection of L. C. G. Clarke. The ermine is said to allow itself to be captured rather than stain

The ermine is said to allow itself to be captured rather than stain its purity by taking refuge in a muddy lair. The drawing dates from about 1494.

Nine Caricatures of Men and Women. Chatsworth.

Five Grotesque Heads. Royal Library, Windsor Castle.

I. Man Engaged in Agricultural Pursuits. Royal Library, Windsor Castle.

		 II. Man Engaged in Agricultural Pursuits. Verso of above. III. Two Seated Nudes and a Woman Washing. Royal Library, Windsor Castle. IV. Man at Work. Verso of above. These two sheets, the purpose or occasion of which is not known, may date from about 1503.
67.	CCLXXVIII	 Studies of St. George and the Dragon, of Horses and of a Cat. Royal Library, Windsor Castle. Studies of Cats and of a Dragon. Royal Library, Windsor Castle. The style of these two drawings seems to connect them with the
68.	CLXXVII	studies for the Battle of Anghiari, about 1503-4. A Castle with a Bastion and Tower. Louvre, Paris.
00.	CLAXVII	Perhaps a scheme for the re-modelling of the Castello, at Milan.
69.	LXXVII	Shields for Protecting Footsoldiers and an Exploding Bomb. Ecole des Beaux-Arts, Paris. One of a series of drawings uniform in style and size which illustrate military inventions and were probably drawn by Leonardo in Milan about 1485-88.
70.	LXXXIII	A Large Cannon being Hoisted on to a Gun-carriage. Royal Library, Windsor Castle. Probably dating from about 1485-88.
71.	CCLXXIII	Row of Four Mortars Firing. Royal Library, Windsor Castle. Another version of this subject has on the back studies for the Leda and for the Battle of Anghiari, on the latter of which Leonardo was working in 1503-4.
72.	CCLXIX	 Studies of Figures, Diagrams and Notes. Royal Library, Windson Castle. Men Ploughing and Digging. Royal Library, Windsor Castle. Two of a small number of drawings representing men engaged in agricultural pursuits which may date from about 1503.
73-	п	Landscape. Uffizi, Florence. Dated by Leonardo 5 August 1473, and the earliest drawing by him which can be precisely dated.
74.	XCIV	Rocks and a Stream. Royal Library, Windsor Castle. Probably dating from Leonardo's first Florentine period.
75•	CCXXXXVI	Bird's-eye View of a River with a Rope Ferry. Royal Library, Windson Castle. Perhaps drawn in connexion with a scheme for canalizing the upper reaches of the Arno above Florence on which Leonardo was working about 1503.
76.	CCXXXXVII	 I. Wooded Landscape. Royal Library, Windsor Castle. Probably dating from about 1511. II. Two Studies of a Conflagration. Royal Library, Windsor Castle An inscription, not in Leonardo's hand, says that the fire represented was made by the Swiss on 13 December 1511.

77-	CCLXIV	 An Eruption in the Side of a Mountain. Royal Library, Windsor Castle.
		II. Two Trees on the Bank of a Stream. Royal Library, Windsor Castle.
78.	CCLXVIII	Study of Rock Formations. Royal Library, Windsor Castle. From a series of geological drawings; probably dating from about 1508-11.
79.	CCLXVII	 I. Stratified Rock Formations. Royal Library, Windsor Castle. II. Study of Rock Formations. Royal Library, Windsor Castle.
80.	CCXXXXV	 I. Valley with Mountains Beyond. Royal Library, Windsor Castle. II. View of a Town and Hills. Royal Library, Windsor Castle. III. Group of Peaks and Foothills. Royal Library, Windsor Castle. IV. A River with a Canal Alongside. Royal Library, Windsor Castle. Nos. I, II and III probably date from about 1499; No. IV is one
		of a series of drawings connected with schemes for canalizing the upper Arno and dating from about 1503.
81.	CCLXV	 I. Allegory: Animals Fighting and a Man with a Burning-glass. Louvre, Paris. The exact significance of the allegory has not been explained. It dates from about 1494. II. Storm over an Alpine Valley. Royal Library, Windsor Castle. Probably dating from about 1499.
82.	XCIII	Study of a Coppice. Royal Library, Windsor Castle. Probably dating from about 1498.
83.	CCXXVIII	Oak-leaves with Acorns and Dyer's Greenweed. Royal Library, Windsor Castle. Probably dating from about 1506.
84.	CCXXX	Two Studies of Rushes in Seed. Royal Library, Windsor Castle. Probably dating from about 1505-8.
85.	(12)	Map of the Valley of the Chiana and of Lake Trasimeno. Royal Library, Windsor Castle.
86.	(13)	Map of the Valley of the Chiana and of the Arezzo area. Royal Library, Windsor Castle.

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