# The Indian Institute of Culture

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<u>Transaction No. 14</u>

LEONARDO DA VINCI A QUINCENTENARY TRIBUTE

By O. C. GANGOLY

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### THE INDIAN INSTITUTE OF CULTURE

#### **TRANSACTIONS**

Many valuable lectures are given, papers read and discussed, and oral reviews of outstanding books presented, at the Indian Institute of Culture. Its day is still one of small beginnings, but wider dissemination of at least a few of these addresses and papers is obviously in the interest of the better intercultural understanding so important for world peace. Some of these are published in the Institute's monthly organ, *The Aryan Path*; then we have two series of occasional papers—Reprints from that journal, and Transactions. The Institute is not responsible for views expressed and does not necessarily concur in them.

#### Transaction No. 14

The Indian Institute of Culture celebrated on April 15, 1952, the birth near Florence, just 500 years before, of the noble Leonardo, whose lustre as an artist, a scientist, a thinker, the passage of the "centuries has not dimmed. The celebration of the 500th anniversary of Leonardo's birth had most appropriately been suggested by -Unesco. Such a wide-ranging mind as his transcends the boundaries of nation, race and creed. In contemplating greatness men rise above the artificial barriers and in claiming common kinship with genius, confess by implication their kinship with each other.

On the same date, at the celebration at Vinci itself, the Director-General of Unesco, Dr. Torres Bodet, gave one of his memorable addresses, recalling Leonardo's motto, which he had faithfully applied: "Remorseless self-dis- cipline"; and his statement, bearing witness to the high stage in human evolution which he had attained: "It is easy to make oneself universal." The world would profit both by emulating his self-discipline and cultivating the universal outlook. We should-train ourselves to look at everything from the largest possible number of view-points and to perceive the link between each separate object and the universe as a-whole. That were indeed the royal road to a united world.

The Institute's celebration took the form of the reading of a paper written especially for the occasion by the distinguished art critic of Calcutta, Prof. O. C. Gangoly, whose services to Indian art are widely known. These have included, besides his professorial duties, the editorship of *Rupam*, which succeeding art journals have never surpassed, his "Little Books on Indian Art, "his two-volume pictorial and iconographic study of *Ragas and Raginis*, etc., and his many articles. Professor Gangoly had come to Bangalore in October 1951 to give at the Indian Institute of Culture three lectures on Indian art which were very much appreciated.

This paper was illustrated with lantern slides and the Special Meeting was complemented by an Exhibition at the Institute of valuable books and articles on Leonardo, assembled with the kind co-operation of the University of Bombay and the British Council.

## LEONARDO DA VINCI A QUINCENTENARY TRIBUTE

It is in the fitness of things that this Institute should celebrate the fifth centenary of the birth of Leonardo da Vinci, one of the great, towering figures of the Renaissance in Italy. While such a celebration is a duty, cast on every cultural institute in India, the performance of such a duty is by no means an easy task, as. very few Indians (except those who have traveled abroad and studied the masterpieces of the great artist in the Museums of Europe) have any direct,, first-hand acquaintance with the works of this great master.

Then, again, it is a legitimate question if an Indian, not born, so to say, in the skin of European culture—built out of the elements of Greek, Greco-Roman and Latin culture—is competent to undertake the onerous task of interpreting and evaluating the products of a culture alien to his own. To this doubt the answer may be found in the fact that many European scholars, such as Havell, Laurence Binyon, Goetz, Kramrisch and others, have walked over (should you say, encroached upon?) the extensive area of Indian fine art, without any pretence to hereditary qualification or competence, to dive into the secrets of what must have been to them an exotic culture, alien to their own.

A French critic, Chesneau, has pointed out that "every nation is, in a certain sense, the most competent final judge of its own Art, from whose decision there is no appeal." But that does not mean that an alien, not born inside a particular school or system of culture, is totally incompetent to make attempts to understand and appreciate exotic forms of art and culture remote from his own, whatever may be the intrinsic value of his amateurish judgments.

We have, at least, one remarkable precedent in which we find a great Oriental critic and connoisseur of art writing an authoritative monograph on the works of a great Italian painter. I refer to the monumental work in three volumes of the late Mr. Yokio Yashiro (Professor of Art in the Imperial Academy of Tokyo), who wrote a remarkable critical treatise on the works of Sandro Botticelli, another great master of the Renaissance. We hope to quote some of the comments of this Japanese critic on some aspects of the works of Leonardo.

The educated Indian of the 20th century, through foreign travels and an intensive study of Western literature in Indian as well as in European Universities, has enlarged his vision and liberalized his outlook and thus developed a moderate competence to negotiate with the revelations of the many phases of European art and culture.

Indeed, many an Indian takes pride in the fact that he is the proud carrier of two stupendous loads of culture, as the direct inheritor of his own ancestral culture and the indirect representative of a property derived second-hand from his European teachers and from his own study of European books and other records of the foreign culture. And he is valiantly striving to do honor to his twin heritage under very trying and adverse circumstances.

Enough has been said to explain and apologize for the so-called incompetence of an Indian to study and interpret the works of the great master-artist of the Italian Renaissance who was born in 1452 and died in 1519. After all, on an occasion like this, it is not necessary to undertake a scientific and independent criticism of the works of the great master but only to tender our humble appreciation and respectful tribute to the memory of a great man who, for half a century, illuminated the intellectual and spiritual atmosphere of Italy and whose reflected glory has lit up and inspired for centuries the culture of the whole of Europe, many

of his masterpieces having been recognized and acclaimed as World Masterpieces—of supreme quality and universal appeal.

Now, in order to understand the exact achievements of Leonardo da Vinci in the various activities of his great life, it is necessary to understand the nature of the intellectual and spiritual movement underlying the Italian Renaissance.

The Renaissance was very largely the *recovery* of what was best in the thought and the art of two forgotten civilizations—the Greek and the Roman— of which the latter had been in a sense the result of the grafting of thoughts and ideals upon a sympathetic stock.

But, if the Renaissance was a *rebirth*, it was also, in a. very real sense, a *new* birth. It was no mere imitation of the old classical culture of Greece—no mere attempt to recreate and restore—no mere effort to live in the moonlight of a sun that could never raise again. It had in it the quality, the vitality of its own modernity. It was the birth of a new temperament, of a new attitude towards life that was not Greek, not Roman, not even wholly Italian, a temperament that embraced the whole scheme of things earthly and heavenly. It was something far wider than a reawakening of interest in the classics of Greece and Rome and in the art, philosophy and manners of the ancient world.

Not in art and philosophy alone, but also in politics and social questions and in the observation and analysis of this phenomena of nature, men were reaching forward to new views, to a wider and freer outlook, despising the restrictions of the dogmas and doctrines of religion. It was the birth of a new Humanism— the setting forth of an enormous creative force in the exercise of human faculties, in search for new truths, new discoveries, in life and in science, in experiments in truth, in the laws of physical nature.

The age of the Renaissance produced men and women of the first order—statesmen, soldiers poets, sculptors and painters, and, curiously enough, even the greatest rogues, who came to. The front and had a quality of genius that their morals or Jack of morals could not corrigpt.

We shall presently discuss the part that Leonardo took in the search for and discovery of new truths in the domain of the visual arts, his solid contribution to th6 intellectual output of the Renaissance.

Before we do so, it is necessary to sketch briefly his life, through the different periods in his career of a multitude of achievements.

Born in a farmhouse in the little town of Vinci, 20 miles from Florence, Leonardo was the illegitimate son of a country notary who afterwards held an official position in Florence. He was brought up as a member of the family in the house of his grandfather, without any inferiority attaching to his birth. In the 15th and 16th centuries, illegitimacy was hot a serious disadvantage and books were written to prove that natural children were neither infamous nor debarred from receiving honors. It may be recalled in this connection that The- odoric, King of the Ostrogoths, and William the Conqueror, to say nothing of Tyrants of the Renaissance period, were bastards, so that in the case of Leonardo the fact that he was not born in lawful wedlock did not affect his career.

At the age of 17 he was apprenticed to a versatile artist, Andrea Del Verocchio, who was an accomplished artist and a goldsmith entrusted with important artistic commissions. Leonardo had as his fellow pupils in the workshop of his teacher such famous artists as Lorenzo di Credi, Perugino and Botticelli, during his pupilage,- Leonardo helped his teacher to finish the painting of *John Baptizing Christ*, adding an angel to the composition which his teacher pronounced better than his own figures and, according to Vasari, the

master gave up painting, half in resentment "that a boy should know more than he."

About this time, Leonardo painted for his father, on a piece of wood, the head of Medusa a perfect picture of horror and monstrosity which was acclaimed as a masterpiece and was afterwards sold to the Duke of Milan for 300 ducats.

From early life the young artist undertook intensive researches into the mystery of forms and made numerous sketches of strange and unusual appearances, faces and types. In 1472, at the age of 20, Leonardo was admitted into the Guild of Painters in Florence. His active artistic career began in 1494— when he entered the service of Lodovico Sforza, the new Duke of Milan. Leonardo offered his services to the Duke in a petition which is one of the most remarkable documents that a genius ever composed about his own powers. He set forth, in. this petition, all that, he could do in engineering science and in the production of the appliances of war, and then went on to say

In time of peace, I believe I could equal any other as regards works in architecture both public and private. I can likewise conduct water from one place to another. Furthermore, I can execute works in Sculpture, marble, bronze or terra-cotta. In painting also I can do what can twe done as well as any other, be he who is May. Moreover I can undertake the making of the bronze horse, which is a monument that will be to the perpetual glory and immortal honor of my lord your father, of happy memory, and the illustrious house of Sforza.

To many of us this catalogue of his capacities as a scientist, an engineer, a painter and a sculptor may seem an idle, boastful exaggeration of his accomplishments. But various documents which have come to light, his drawings and his writings recording his theories of art, appear to support a substantial part of the claim..

His interest in mathematics and in .anatomy is borne out by much authentic evidence. His *Collectanea* (collections from various sources) contain a mass of unasserted data on the principles of mathematics. And the Cardinal of Aragon in one of his letters says that "this gentleman has written quite exhaustively on anatomy with illustrations;"

In 1507 we find him preparing for the Governor of Milan a plan for a splendid tomb in marble and bronze to commemorate a French Marshal.

Apart from purely architectural works he undertook some engineering works which involved utilizing hydraulic power. That he also specialized as a military engineer is proved by the famous Cesare Borgia {Duke of Valentinois} employing him to inspect the military strongholds of the State. That he was a many-sided genius is endorsed by Cellini and others.

He prepared a model of the equestrian monument of the Duke's father which was completed shortly after 1490, but the wax model was never cast in bronze and his rival, Michael Angelo, is said to have called out in derision, "Thou hast designed an equestrian figure, and hast wished to cast it in bronze, but since thou couldst not, thou must retire in shame and dishonour:"

Leonardo's service with the Duke in Milan, which covered 16 years, came to an end with the Duke's losing his Kingdom by the French invasion in 1499. But the artistic records of this long period in Milan are very few. Besides painting the fresco of the famous Last Supper, the Virgin of the Rocks, executed as an altar decoration, some decorations for the Castello and a few portraits, there are no other records of his pictorial creations.

 $<sup>^{1}</sup>$  The Makers of the Renaissance. By J.D. Symon and S.L. Bensusan. (1913)

Between 1500 and 1506 he was chiefly in Florence and traveling about in the employ of Cesare Borgia. The most important works of this period are the cartoon of *St. Anne and the Virgin* and the cartoons for a civic fresco of the *Battle of Anghiari* to decorate the council chamber of the palace of the Signory in Florence. Though some of the cartoons have survived, the fresco was never finished.

To this-period also belong the famous portrait of *Mona Lisa*, the figure of St. John, and his *Leda*. To-the year 1504 belong two important incidents: (1 y His appointment to the committee of experts, which included della Robbia, Filippo Lippi, Botticelli, Perugino, Credi and many others, who were appointed to select a suitable site for placing Michael Angelo's famous monument to *David*; and (2) the death of Leonardo's father on July 9th, 1504.

The year 3507 brings him in contact with Louis XII, King of France, who appointed him Ins Court Painter.. In 1513, Leonardo came to Rome and, was in contact with Pope Leo X, who gave him a good reception and some commissions. But, except a Madonna and a small picture of a Child, none of the pictures of this period can be traced.. On the 9th of January 1515, Louis XII of France died am} his successor, Francis I, came to Italy in December 1515, met the Pope and took Leonardo with him to France. In January 1616 the artist, accompanied by his pupil, Melzi left Italy for the first time, never to set foot on its soil again.

He was now about 64 years old but looked much older; Cardinal Louis of Aragon, who paid him a visit on October 10th, 1517, described him as "a grey-; beard of more than 70 years." The Chateau of Cloux near Amboise was assigning-' Ed to him for a residence, and a really princely provision was made for him. The King of France, a sincere admirer of Leonardo's genius, often visited him to enjoy his conversation. Devoted to scientific studies, Leonardo spent his last days in perfecting and finishing, to the order of Francis I, some pictures begun in earlier life. He could not have executed any new paintings, as his right hand was crippled by paralysis, which prevented him from using his brush. He felt that he was nearing his end. He summoned a notary on 23rd April 1519 and made his will, bequeathing cash monies to his half-brothers, and leaving his manuscripts and the appliances of his crafts to his favorite pupil Melzi. He died on the 2nd of May 1519, after receiving the Sacraments of the Church, perfectly resigned.>

It is impossible to realize the extent and nature of Leonardo's gigantic talents by studying merely his few surviving masterpieces—not more than four or five. We must study also the records of his literary works, represented by> a large mass of manuscripts recording his speculations, not only on various phases of the visual arts, but also his research into various departments of science. We must study too the large quantities of his sketches, drawings and Cartoons— which were the preparatory designs of many important pictorial projects never completed. The principal examples of his drawings are collected in the Uffizi Gallery in Florence, in the Royal Library at Windsor Palace and-in the British Museum.

His Manuscripts are represented by several collections, of which the most important is the *Codex Atlantico* in the Ambrosiana Library at Milan. Indeed, these personal records and notes and the fragments of his letters present by far the most complete record of his mental activity which—and this may be said without exaggeration—extended into practically all the avenues of human knowledge. Edward McCurdy has written:—

These manuscripts serve in a sense to show the mind in its workshop, busied in researching, in making conjecture, and in recording phenomena, tempering to its uses, in so far &s the human instrument may, the vast forces of nature.

We have already referred to the manifold phases of his genius, his researches into the secrets of science as well as of the visual arts. In fact he set himself to practice every art in which design has a part. For he had such a marvelous mind that, besides being a good geometrician, he worked at modeling and also made many architectural designs. He was the first, while he was still quite young, to discuss improving the channel for the River Arno from Pisa to Florence. He made models of mills and presses and machines to be worked by water; designs for tunneling through mountains; levers and cranes for raising great weights. It seemed that his brain never ceased inventing. Many of these drawings have survived and are scattered about in various collections.' Among them was one drawn for some of the city fathers of Florence to show how it would be possible to raise the Church of Santa Giovanni and put steps' under it without throwing it down; he supported his scheme with strong reasons' and graphic drawings.

It is surprising to find this great pictorial artist of the Renaissance diving, into diverse secrets of nature, sometimes on the track of the laws of mechanics. And it is believed that he was the first to discover the principles of aeronautics, the art of flying.

Leonardo, whose genius dared to soar into the Infinite far above the ideas, of his age, was filled with the desire once in his life to allow mankind to see the vast range of his mental powers. For many years he had devoted his earnest; attention to the flight of birds,, and lie rendered himself familiar with every? Single characteristic of "wing action." In consequence, the conviction grew upon him that it must be possible for men to raise themselves above the earth on wings. Leonardo felt sure of success. The sentences which he wrote thereon ring with a trumpet flourish of triumph.

The huge bird will take his first flight high aloft on the ridge of the great Ceceri—the mountain between Fiesole and Majano; he will fill the universe with wonder and all writings with his fame, and will give deathless renown to the nest which witnessed his birth.

Among his literary notes are several folios in the *Codex* recording his researches into the flight of birds?

Leonardo's knowledge of the mechanical sciences is illustrated in many happy applications of his talent in this line. His inventive skill in this respect was frequently used in devising amusements for the princely circle at the court of the Duke of Milan. The most important example is his design for the "Masque of Paradise" to entertain the guests at the marriage of Gian Galeazzo Sforza and Isabella of Naples, held in 1489. In this clever device, the Paradise and the seven Planets were represented in rotation, the Planets being symbolized by actual men, attired as the poets describe them. This mechanical marvel received great popular appreciation.

The second mechanical marvel was devised to amuse the King of France when he visited Milan. On this occasion he constructed a Lion, which advanced some steps and then opened his breast, which revealed a bunch of lilies.

Enough has been said to indicate that the talent of this great master was equally divided between the sciences and the arts. At times his scientific studies made him positively detest his connection with art. In 1502, Pietro da Novellara told Isabella d'Este (whose portrait is one of Leonardo's master- pieces): "His mathematical experiments have withdrawn him from painting to such an extent that he cannot endure the sight of a brush."

Yet in the intervals of his scientific experiments this versatile genius produced some masterpieces of painting which still continue to excite the admiration of the world.

His versatility in the arts caused him to seem an embodiment of the spirit of the Renaissance. Alike as painter, sculptor, architect, engineer and musician, he aroused the wonder and admiration of his contemporaries, some of whom we shall presently quote. Modern scholars have acclaimed him as one of the greatest of savants: not in completed endeavour which of itself reached fruition, but in conjecture and anticipation of what the progress of science has, in course of centuries, established.

Coleridge has called Shakespeare "myriad-minded." If the Baconian contention were established the result would afford a parallel to the "myriad-mindedness "of Leonardo. . . Morelli speaks of him as "perhaps the most richly gifted by nature among all the sons of men." Equally emphatic is the tribute of the French King, Francis I, recorded by Benvenuto Cellini:—

He did not believe that any other man had come into the world that had attained so great knowledge as Leonardo, and that not only as sculptor, painter and architect, for beyond that he was a profound philosopher.

We shall presently cite some of his profound philosophical utterances on men and things. Before that we shall quote his Own comments on "book-learning":—

I am fully aware that the fact of my not being a man of letters may cause certain arrogant persons to think that they may with reason censure me, alleging that I am a man ignorant of book learning. Foolish Folk! Do they not know that I might retort by saying, as did Marius to the Roman Patricians: "They who themselves go about adorned in the labour of others will not permit me my own." They will say that because of my lack of book-learning, I cannot properly express what I desire to treat of. Do they not know that my subjects require for their exposition experience rather than words of theirs? And since experience has been the mistress of whoever has written well, I take her as my mistress; arid to her in all points make my appeal.

Let us see how his lack of "book-learning" did not prevent his expressing in pithy forms, maxims and aphorisms, some of the profound experiences of life and fundamental truths:—

Tears come from the heart, not from the brain;

Vows begin when hope dies.

What is it that is much desired by men, but which they know not while possessing? It is sleep.

O thou that sleepest, what is sleep? Sleep is an image of Death. Oh, why not let your work be such that after death you become an image of immortality; as id life you become when sleeping like unto the hapless dead.

As a well-spent day brings happy sleep, so life well used brings happy death.

Truth alone was the daughter of time.

He who does not value life deserves it not.

Ask counsel of him who governs himself well.

He who thinks little makes many mistakes.

Let him expect disaster who shapes his course on a young man's counsel.

He who neglects to punish evil, sanctions the doing thereof.

He who takes the snake by the tail is afterwards bitten by it.

He who has most possessions should have the greatest fear of loss.

As courage endangers life, even so fear preserves it.

Threats only serve as weapons to the threatened.

He who walks rightly seldom falls.

You do ill if you praise, but worse if you censure what you do not lightly understand.

Happy is that estate which is seen by the eye of its lord.,

Reprove a friend in secret, but praise him before others.

Lie not about the past.

Bars of gold are refined in the fire. -

It is by testing that we discern the gold.

As is the mould, so will be the cast,

A vessel of unbaked day when broken may be remolded but not one that has passed through the fire. '

When fortune comes, seize her with a firm hand, in front, for behind she is bald.

Intellectual passion drives out sensuality.

He who curbs not lustful desires puts himself on a level with the beasts.

Appetite is the stay of life.

We support life by the death of others.

All our knowledge originates in opinions.

Poor is the pupil who does not surpass his master.

In life beauty perishes, not in art.

The painter contends with and rivals nature.

Thou, 0 God, dost sell unto us all good things at the price of labour.

Having cited a number of practical aphorisms based on experiences of life we shall now proceed to deal with Leonardo's theories on art on which he has left ample materials in his literary manuscripts.

He starts by making interesting comparisons between Painting and Poetry and between Painting and Sculpture.

The eye which is called the window of the Soul, is the chief means whereby the understanding may most fully and abundantly appreciate the infinite works of nature; and the ear is the second inasmuch as it acquires its importance from the fact that it hears the things which the eye has seen. If you historians, or poets, or mathematicians had never seen things with your eyes you would not be able to describe them in your writings. And if you, O Poet represent a story by depicting it with your pen, the painter with his brush will so render it as to be more easily satisfying and less tedious to understand. If you call painting "dumb" then the painter may say of the poet that his art is "blind painting." Consider then which is the more grievous affliction, to be blind or be dumb. Although the poet has as wide a choice of subject as the painter, his creations fail to afford as much satisfaction td mankind as do paintings, for, while poetry attempts with words to represent forms, actions and scenes, the painter employs the exact images of the forms in order to reproduce these forms. Consider, then, which is more fundamental to man, the name of man or his image? The name changes with change of country: the form is unchanged except by death.

Take the case of a poet describing the beauties of a lady to her lover and that of a painter who makes a portrait of her<sup>1</sup>; you will see whither nature will the more incline the' enamored judge....

If poetry treats of moral philosophy, painting has to do with natural philosophy; if the one describes the workings of the mind, the other considers what the mind effects by movements of the body; if the one dismays folk by hellish fictions, the other does the like by showing the same things in action.

According to Leonardo, "Sculpture is less intellectual than painting and lacks many of its natural parts."

"In the first place, sculpture is dependent on certain lights, namely those from above' while a picture carries everywhere with it its own light and shade; light and shade therefore are essential to sculpture. In this respect the sculptor is aided by the nature of the relief which produces. This of its own accord, but the painter artificially creates them by his art,' .The sculptor cannot represent transparent or luminous things.

Sculpture reveals what it is with little effort; painting seems a thing miraculous, makes things intangible appear tangible, presenting in relief things which are flat, in the distance things near at hand. In fact, painting is adorned with infinite possibilities of which sculpture can make no use.

It will be useful to show by some chosen passages what clearness of thought Leonardo possessed in matters of art; what unusual power of language he had at his command; finally how he grasped the problems of painting in the widest sense, foreshadowing what the 19th century should first bring to fulfillment.

On whom Nature bestows it not, .to him one cannot teach the art of painting. For this reason it is the noblest among all the imitative arts. The painter is lord of all things.... And in truth all that the universe holds, be it real and visible or but the creature of imagination, the painter- has in spirit and later in his hands.

The learning of the art is a gradual process. The eye must first be schooled by the work of a great Mister, afterwards by Nature. The young student should, in the first place gain knowledge of perspective, in order to

give each object its proper dimensions. Thereafter it is needful for him to draw after a good master's hand to use him to a good style of drawing limbs. Next, he should study Nature and so confirm in his mind the reason of the precepts which he has learned. He must also spend some time in viewing the works of old masters and finally acclaim 'himself to practice the art which he has acquired

But an artist should never turn his back on Nature. "I say to painters that one should never copy the manner of another. For. In that case, as far as his art is concerned, he cannot be called the *child* but the *grandchild of* Nature."

Like a true, Florentine, Leonardo; prefers the strong relief of figures to beauty of coloring.,

A painting will only be wonderful f *it* the beholder by making that which is not so appear raised, and detached from the wall. But the colors only do honor to those masters Who prepared them.

By far the most important point in the whole theory of painting is to make the action express the psychical state of each character, *e. g.*, desire, disdain, anger, pity and the like.

Strongly as Leonardo urges the necessity of a painter's gaining an accurate knowledge Of anatomy, he protests equally strongly against showing too much of this knowledge.

"O anatomical painter" (probably referring to Michael Angelo), "be-ware lest a too great knowledge of bones, sinews and muscles. Cause you to become a wooden painter, while you strive to make your- naked figures show the whole play of their muscles."

A good painter has two chief objects to paint—a man and the intention of his soul. The former is easy, the latter hard, for-it must be expressed by gestures and movements of the limbs.... Only a complete knowledge of gesture renders it possible to depict the various emotions of the soul.

In recording his ideas on the painter's craft, Leonardo's language sometimes rises to the highest poetic beauty:—

The divinity which dwells in the painter's art brings it about that the painter's soul soars upwards till it partakes of the nature of the Holy Spirit. For with power and freedom it busies itself in the creation of divers animals, of all manner of beings, plants, fruits, landscapes, fields and mountain tops; of fearsome and ghastly spots which fill the onlooker with affright; likewise of pleasant regions gracious and glad with gay, flowered meadows which the soft breath of the wind stirs into gentle ripples that follow the fleeting stream of the breeze.

Again and again he lays stress on minute observation yet at the same time' he leaves the fullest freedom to the fancy.

To stimulate the fancy, Leonardo advises the artist to look at walls "that are bespattered with all manner of stains or at veined marbles of various hues" or into the embers of the fire, into clouds ,or puddles: "there may one behold landscapes battles, figures in , lively motion, queer and wondrous forms, also things monstrous as demons." "By confused and vague objects the inventive genius awakens to new exertions,"

Here in the domain of art, Leonardo's two natures interpenetrate most wonderfully, the scientific spirit of enquiry mingling with the creative impulse of the spirit. We are spectators of a drama which is unique in the history of the human soul.

But Leonardo's greatest contribution to the pictorial art of the Renaissance was his discovery of the principles of lights and shadows in their application to- pictorial art.

In one of his Notes, "he asserts that "Light and Shade are the first amongst eight parts of Painting." It is in the treatment of light and shade that he was predominantly the innovator and he has been justly called the inventor of *chiaroscuro*—the contrasts and relative values of lights and shadows. So much light and shade as are necessary to express the full roundness of objects he thoroughly mastered. Of light and shade as, a separate

element of art/ capable of its own range of expression, of light and shade which veils rather than reveals Form he chose not to utilize hi§ knowledge. After a long description of the effects of sunlight upon foliage, of the colour of the sky, in the, high lights, of the yellow light where the sun shines through the leaf-and the interruption of this light where the shadow of one leaf falls upon another "these things," he said, "should not be painted—because (key confuse the Form,"

He distinguishes between the two kinds of effect of light on Forms,; (*I*) the prevalence of light over dark surfaces producing the accentuating, effect of relief—of sculpture; and (2) the contrary effect of the prevalence of shadow—a cloudiness that obstructs the vision of figures and wraps them in a veiled atmosphere that bathes everything.

In a brilliant passage, Leonardo clearly sets forth the relation between lights and wraps them in a veiled atmosphere that bathes everything.

That body will present the strongest contrast between its lights and shadows, which is seen by the strongest light, such as the light of the sun or at night by the light of a fire, but this should rarely be employed in painting because the works will remain hard And Devoid of grace.

A. body which is in a moderate light will have but little difference between its lights and shadows: and this comes to pass at the fall of the evening, or when there are clouds: works painted then are soft in feeling and every kind of face acquires a charm. Thus in every way extremes are injurious. Excess of light makes things seem hard; and too much darkness does not admit of our seeing them. *The mean is excellent*. ( *Note-Books*, pp. 132-3).

The disappearance of objects in the shades of twilight, in the mists that rise from water-courses, the last quivering of the light, the flicker of an indefinite' Smile across a human face (as in *Mona Lisa*), the trembling of a veil or of an unruly lock, suggest to the artist the secret of pictorial effects unknown in the art of his contemporaries.

In this connection Yokio Yashiro, the great Japanese critic, has made a very profound remark:—

Leonardo was supreme because he was, as it were, Nature herself, using natural laws to conform with his desires; he was at one with the movement of Nature, and so in him the distinction between the objective and the subjective disappeared. Botticelli belonged to another sphere, where the subjective and the objective stood in sharp contrast.

In presenting the versatile portrait of the great Italian we have depended, too much on a verbal presentation of the available data, without citing visual illustrations. From his surviving masterpieces of painting. This has become unavoidable—as Leonardo's surviving, paintings are very few and we have not at our disposal lantern slides illustrating *all* even of his few masterpieces.

We shall now throw on the screen—one by one—those of his paintings of which we have been able to procure slides.

We will begin our demonstration with a few Portraits, of which some of his self-portraits are very interesting.

(1) An undoubtedly authentic picture, which represented Leonardo in his earlier years, has not come down to us.

This Portrait—in the Uffizi Gallery—represents him in his later years, when he had already passed his youth. In this self-portrait the most attractive features are the flowing beard and the long locks of hair which descend from the recesses of the black cap and mingle with the flowing beard in separate and independent currents. These flowing locks

invest the face with a sedate dignity and by contrast emphasize the youthful charm of the face, shining out from the obscuring clouds of the hair in a quiet grandeur. We notice the finely shaped aquiline nose with its graceful lines accentuated by the dark shadows which obscure; and obliterate the other half of the face. The thin moustache on the Upper lip draws our attention to the reticent beauty of the lips, closed in a manner which reveals the quality of decision and determination. This is a pronounced and at the same time a delicate feature of the face which is not lost in the profusion of the flowing locks of hair.

There are distinct furrows and folds which, in spite of their emphatic lines, do not actually spell out any rebuking scowl. These lines characterize the habits of meditation of one given to incessant speculations and philosophizing—always diving into the secrets and profound problems of Nature and of Life.

The alert glance of the eyes has a soft, charming beauty, free from any harshness or resentment. The appearance has almost a feminine grace and an attractiveness of indefinable beauty. The soft, round cap with a brim offers a soft shadow which sets off the charm of the face with singular effect.

The only criticism that one can offer is the absence of the happy mean between light and shadow, for Leonardo has himself set the standard for the relative values of light and shadow, a treatment of shadow which should soften but not obscure the features. Here, half the face is almost under an eclipse; which prevents us from examining the second eye and the eyebrow.. Very probably this so-called effect is exaggerated in this black-and-white photograph and is absent in the colour scheme of the original portrait.

Whatever may be its imperfection, it is a dignified, convincing presentation of the features with a charm and an attraction quite its own.

(2) Our next picture is another "Self-Portrait" drawn in red chalk, in the Royal Library of Turin, which undoubtedly represents the Master during his last years. And we can excuse the error of the Cardinal to whom the artist appeared to be over 70 years of age though his actual age at the time was 64.

For in this drawing Leonardo appears to us as a patriarch, as a man whose term of life had far exceeded the average. Unremitting mental toil must have furrowed his countenance beyond, his actual years, the impression being heightened by the sedate grandeur of the partly bald head and its noble curve.

Beneath the shaggy eyebrows, large impressive eyes shine out from a face adorned with long flowing hair and beard. The first glance, no less than protracted study of the drawing, reveals to us an extraordinary personality. So must he have impressed his contemporaries in earlier days and popular report soon invested this brilliant genius with further striking qualities. Stories are told of his immense bodily strength and of his remarkable physical dexterity. These portraits do not give us any intimation of his style *at* dress. According to reports handed down this differed widely from the fashion of the day; he wore a short coat instead of a long one, as others did; and his long and well-kept hair attracted the regard of all eyes and survived in the memory of posterity. That there was something princely and magnificent in his bearing is quite obvious in the magnificent torrent of the beard, which, in its convincing lines and rhythmic flow, appears to challenge the beard of Michael Angelo's famous statue of Moses.

We are indeed in the presence of a dynamic personality who was undoubtedly one of the Pillars of the Renaissance. (3) Another portrait from his brush, which was undoubtedly the precursor of the later portrait of *Mona Lisa*, is a remarkable presentation of a beautifully dressed young lady, in the Louver Gallery in Paris.

It is the portrait of Lucrezia Crivelli, better known as "La Belle Ferroniere." She was the mistress of Ludovici, the Duke of Milan, and the patron of Leonardo. The portrait therefore belongs to his "Milan Period." Claude Williamson Shaw, an English artist and an ardent student of Italian Masters, has thus; commented on this beautiful portrait:-

Love is an adequate word to express my devotion to this dark, frail lady with 'the estimating reproachful eyes, who held, for a time, the deep heart of Leonardo.

Very apposite is the characterization of the eyes, which are indeed "reproachful" in their bold, indignant stare.

Very charming is the coiffure which in its descending curves outlines and emphasizes the beauty of the face as they cover part of the cheeks and wholly conceal the ears.

The noble, shining brow, bounded by the outline of the hair, is emphasized by a narrow string—which keeps in position a brilliant diamond placed at the centre of the brow.

The most characteristic feature of the composition is the assembly of curved lines. They flow into one another in a happy harmony and make us forget that there is hardly a straight line in the whole painting. Take the line of the embroidered edge of the bodice near her neck. As we follow its descent from the shoulder we notice the effect of the opulent curve, very convincing in its severity.

The outer edge of the embroidery flows into the line of the ornament which carries it down the front of the dress, adding immeasurably to the dignity of the portrait.;

The nobility of the neck and shoulders is emphasized and enhanced by the ropes of jewels which surround the neck in three folds and then descend down the bust in two graceful streams.

It is indeed a fine masterpiece, anticipating *some* of the qualities of the *Mona Lisa*.

(4) We now come to the greatest masterpiece of the Master-Painter—the world-famous *Mona Lisa*, the most popular picture in the world. Since the time of Vasari, tons of comment and description have been written about this picture. The subject of it was the wife of Zanobi del Giocondo. *Mona Lisa is* world- famous not because it represents a particular woman but because it typifies *every woman*. It is a final and complete statement of the eternal enigma of Womanhood, a confession that man can never understand women and an unforgettable revelation of what women really think about men, of their pride in their ancient wisdom, of their secret sense of superiority, of their amused tolerance for the antics of the creatures who think themselves *men* but whom women know to be mere *children*. All this and more is expressed by Leonardo in his *Mona Lisa'*, and is not this an infinitely greater achievement than painting the face of a pretty girl?

Much rhapsodically nonsense has been written about the *Mona Lisa* and her enigmatical smile and there have been endless speculations as to her character and the meaning of her expression. According to some critics, this is all beside the mark. The truth is that the *Mona Lisa* is a study of delicate modelling, little more. Leonardo had discovered that .the smiling expression is much more a matter of the modelling of the cheek and of the bones below the eye than of the change in the line of the lips. It interested him, with his new power of modelling, to produce a smile wholly by these delicate changes of surface; hence,

the mysterious expression.

Poets may find "La Gioconda" a vampire, or what-not; to artists with a sense of form her portrait will always be a masterpiece because it is one of the subtlest and most exquisite pieces of modelling in existence. It is perfect as the surface of a Greek marble is perfect, beautiful with the beauty of a lily petal\* and is well worth the six years of study and of labour that it is said to have cost.

Vasari has recorded the device of Leonardo to secure a pleasant and beautiful expression of the face: "While Leonardo was painting her portrait he kept constantly near her musicians, singers and jesters, who might make her laugh, and so dispel the melancholy which is so easily imparted to painted portraits." This was on the principle of the famous line of the poet Wordsworth: "Beauty born of murmuring sounds shall pass into her face."

But a recent French critic has discovered a very prosaic reason for this unfathomable smile. The critic observed that "La Gioconda" smiles With only the left side of her mouth, but this is in accordance with the customary advice given to women in Renaissance times as to how to look most graceful. This custom is referred to in a contemporary Italian work on social customs, dated 1544. The passage giving the advice runs as follows:—

From time to time close the mouth at the right corner, as if you were smiling secretly .. .not in an artificial manner, but as though unconsciously. This is not an affectation—if it is done in moderation and in a restrained and graceful manner and accompanied by innocent coquetry and by certain movements of the eyes.

This was a precept for ladies of fashion, and we should not overlook the fact that "Mona Lisa," who plucked her eyebrows and the hair above the brow, was one of these.

This portrait was painted not for her husband but for Giuliano de Medici— the alleged lover of "Mona Lisa." Leonardo had brought the painting to France when Francis the First purchased it for 4,000 gold florins.

An English critic has made a very happy and brilliant comment on this picture: "The picture is at once Leonardo's greatest victory, and his only defeat; a victory because it fills the mind with unanswerable questions, a defeat because it answers none of them."

(5) We now come to another world-famous masterpiece of the great master, *The Last Supper*, painted on the walls of the refectory for the Friars of St. Dominic at the Convent Church of Santa Maria delle Grazie in Milan, which Vasari, his biographer, labels as a "thing most beautiful and marvellous." The picture is now in ruins, having. faded awing to the impermanent colours used in painting it. In its present ruined condition we can get no adequate notion of what it must have been when Leonardo had finished it. We can form a much better idea of it if we study the copy of it made by Marco d'Oggionno, a pupil of Leonardo.

In the copy we can easily study Leonardo's fundamental conception. That is secure in the memory of mankind and it is inconceivable that it should ever perish.

It is well known that Leonardo based his picture on Christ's ominous words: "One of you shall betray me."

The Twelve Disciples of Christ fair into groups of three. Each group of three is closely knit together by lines and seems to be filled with a common life.. Immediately on the left of Christ we find a very closely knit group representing St. Thomas, St. John the Elder and St. Philip.

On the right of Christ we have another group: St. Peter and St. John talking to each

other over the shoulders of Judas, who is in the foreground intently looking at the face of Christ. At the extreme end, on the left, we have an independent group depicting St. Matthew, St. Thaddeus, and St. Simon. This is echoed by a similar group at the extreme end on the right. Yet these four independent groups are very subtly and skillfully connected with each other by artistic devices which are related to each other in a wonderful dramatic unity and harmony. Each figure, with individual gesture and individual facial expression, calls for separate attention and scrutiny, yet they combine in a unique unity held together by the entrancing nobility of the central figure.

According to Vasari, Leonardo "gave to the heads of the apostles great majesty and beauty but left that of Christ *imperfect* not thinking it possible to give that celestial divinity which is required for the representation of Christ.

There is a funny story recorded by Vasari about the slow progress of the execution of the fresco.

It is said that the Prior of the Church (who was closely watching the work) was very importunate in urging Leonardo to finish the work, it seeming strange to him to see Leonardo standing half a day lost in thought. The Prior complained to the Duke who sent for the artist and urged him to finish the work quickly. Leonardo gave his explanation and "reasoned about Art, and showed him that men of genius may be working when they seem to be doing the least, working out inventions in their minds and forming those perfect ideas which afterwards they express with their hands. He added that he still had two heads to do; that of Christ, which he would not seek for in the world, and he could not hope that his imagination would be able to conceive of such beauty and celestial grace as was fit for the incarnate beauty. Besides this, the head of Judas was wanting, which he was considering, not thinking himself capable of imagining a form to express the face of him who, after receiving so many benefits, had a soul so evil that he was resolved to betray his Lord and the creator of the world; but this second he was looking for, and if he could find no better there was always the head of this importunate and foolish Prior. "This moved the Duke marvelously to laughter, and the Duke said that he was a thousand times right.

(6) As a matter of fact we have a remarkable "study" by Leonardo for the *Head of Christ* in the Brera Gallery at Milan, which has preserved for us a record of the artist's imagination for the ideal head of the Christ for the *Last Supper*.

In this entrancing study, with an ideal expression of contemplation and sorrow, Leonardo imagined a head of significant power and expression to interpret his idea of the "Incarnate Divinity," suitable for the picture. In this moving and vibrant picture of Christ Incarnate, the symbol of Sorrow and Compassion, we have another record of the consummate imaginative power of a great Master.

Our modern scholars have dug up from the records of the artist's works 2L piece of prosaic evidence to contradict the assertion of the artist that "he would not seek for in the world—" any model for the head of Christ."

There are two notes—in his own handwriting—on two sketches, *viz*, "Count Giovanni—for the Head of Christ" and "Allesandro Carissimo for the Head of Christ," which suggest that the artist must have sought some human models from contemporary society as preliminary sketches for the head.

At any rate, this drawing gives a much better idea of how the head of Christ in the *Last Supper* looked originally than what is left of it in the wall painting itself. Gold Schneider writes that the mutilated remains of "this greatest of paintings prior to Michael Angelo's Sistine Chapel frescoes still radiate vitality, just as a tragedy of Sophocles speaks to us again even in the poorest translation, or the Elgin Marbles, though mutilated and broken in fragments."

(7) It is unfortunate that we have no slide to illustrate *The Virgin of the Rocks;* one of Leonardo's imposing masterpieces in the Louvre, which has extorted the admiration of the critics. But we have some compensation for the missing picture in the face of *St. Anne*\* a detail of the head of the Saint from the group depicting "The Virgin and Child with St. Anne" in the Louvre. From this group we have extracted the head of St. Anne who is smiling at Mary, who on her part looks down with a smile on the child playing with a lamb. In the complicated group with many counter attractions we miss the ecstatic rapture on the face of the Saint which we are able to study in this enlarged detail. The divine expression of the face, the sweet rapture of the smile, is a counterpart in a different flavour to the head of the Christ in our last picture.

We cannot do better than quote C, Lewis Hind's excellent commentary on this head:—

It is a beautiful bead, something unearthly yet curiously\*Pagan, as *it* she had the secret of things and sat apart, aloof, watching mortal affairs, even world-moving mortal affairs, and smiling mysteriously with the thoughts of one who knows Leonardo is half a God. He had a miraculous power of synthesis. All mystical knowledge is in that head of St. Anne.

We hope that we have been able to present, however inadequately, some aspects of the myriad-minded genius of Leonardo, to whom it is our great privilege to render this quincentenary tribute.