

## **MEDICINE AND ART: AN HISTORICAL OVERVIEW**

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### **ABSTRACT**

Art is an exercise of human skill - sometimes figments of imagination to express the natural world in various forms-literal and visual. Medicine and art interact in the doctor's life and work. The science and art of healing takes many forms; so does the expressive and evocative process known as art. The details are presented here.

Art is the creation of works of beauty. (Latin - "ars" means "craftmanship"). It is an exercise of human skill - sometimes figments of imagination to express the natural world in various forms - literal and visual. The values of art and science are splendidly expressed by Doctor John Keats (1795 - 1821) in his famous poem - "Ode on a Grecian Urn" (1819) :

'Beauty is truth, truth beauty,' - that is all  
Ye know on earth, and all ye need to know.

John Keats was trained as a doctor at Guy's Hospital, London (Est. 1721 - opened 1728) and at the Society of Apothecaries, London (Est. 1617). Keats had decided that his future lay in poetry. He was determined, in his own words, to write, not for art's sake only, but "for the sake of truth and for the sake of life". Keats was afflicted by one of the incurable illnesses of the day - tuberculosis (then called "consumption") which lead to the end of his life prematurely on 23rd February, 1821, at the green age of 25.

Keats was dedicated to both beauty and truth and to the eternal values of art and science; so is the modern doctor. This author has emotional and sentimental links with Keats for being an alumni of Guy's Hospital Medical School, as well as a Fellow of the Faculty of History and Philosophy of Medicine of the Worshipful Society of Apothecaries, London.

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So is the modern physician. For, there is an art, as well as a science (and related technology) of medicine. It is but natural, then, that there should be a long tradition of the doctor as artist, in music, in literature and in the visual arts.

In the semi-mythical beginning of medicine, Imhotep, the Egyptian physician around 2700 B.C. was also architect of the Step Pyramid of Sakkara. Similarly, Chiron, the Centaur (half horse, half man) of Greek mythology, was expert both in music and in healing.

He educated Asclepius of Greek Temple Medicine in the art of medicine and music. Prominent and numbered among other musicians/physicians/surgeons was the German surgeon, Theodor Christian Albert Billroth (1829 - 1894) - the pioneer of abdominal Surgery. He was the first to resect the stomach (1881) and also the oesophagus (1872), the Pancreas (1884) and the larynx (1873) for cancer. He was an intimate friend of the German composer, Johannes Brahms (1833 - 1897). Brahms dedicated two string quartets to Billroth. Alexander Porfiryevich Borodin (1833 - 1887) composed the unfinished opera - "Prince Igor" (which contains the Polovtsian Dances), while Professor of the Medico-Surgical Institute at St. Petersburg, Russia. He also composed three symphonies and the symphonic sketch - "In the Steppes of Central Asia".

Even more impressive, is the list of those prominent in literature who have also been physicians (vide - Sisir K. Majumdar : "Doctors in Literature". *Bull. Ind. Inst. Hist. Med. Vol. XXIX*, pp. 29-50, 1999). Art and literature undoubtedly widen the mental horizon and help towards a better understanding of human conditions in health and disease.

### **Visual art**

In the visual art there are fewer examples of the doctor/artist than in literature. Perhaps this is due to the dominant aesthetic values of painting and sculpture in the West for a century or more. Modern art, especially in its cubist and surrealist phases, may perhaps be temperamentally, as well as stylistically, unsuited to the modern physician.

While there are many gifted amateur doctor/artists, relatively few are truly prominent in both fields. As medicine has become a science with more emphasis on technology, Western art has become less representational. Thus, though art has often been a sympathetic avocation for the doctor, few have achieved artistic eminence. However, William Rimmer (1816 - 1879) of Boston became America's first major sculptor and a

leading teacher of anatomy. His “Art Anatomy” (1876), combining formal anatomical studies with expressive art, was described as among the greatest pedagogical (educative and dogmatic) art works ever produced in the U.S.A.

### **Functions of art**

Medicine and art interact in the doctor’s life and work. The science and art of healing takes many forms; so does the expressive and evocative process known as art.

Art has got a cultural basis. It played a conceptual function in ancient Egypt; they relied on “what they knew” (Gombrich, 1961). For the Egyptians, hieroglyphics (writing in symbols) were both an art and a means of communication - so does calligraphy (beautiful handwriting) for the Japanese and Chinese. Art may be primarily representational. Modern impressionism, by contrast, seeks to move beyond representation to the portrayal artists, such as the French Impressionist, Claude Monet (1840 - 1926) of “what they saw” under different environmental conditions. Art could be conceptually symbolic, schematic and impressionist (Fry, 1934). These issues have profound implications for medical illustration. An anatomical drawing must do more than reproduce structures with photographic accuracy. The issue is, rather, to use figure-ground relationships, highlights, shading, texture and other graphic techniques, to convey understanding beyond what a photograph could reveal.

In Ancient India Temple art showed tonsillectomies and amputations. Around 2500 B.C. this art based on the religious traditions of Hinduism, presented healing in terms of gods and goddesses, including a Mother Goddess. Charts of acupuncture in China and Japan were both medical documents and works of art.

The Eye of Horus, portrayed in Egyptian hieroglyphics over 5000 years ago as an “R” with an eye inside the top circle, became a symbol of healing. Later, in the Middle Ages (400 - 1500 A.D.) it reappeared in a stylized number “4” affixed to prescriptions by doctors and alchemists hoping to invoke divine aid. Still later this symbol merged with the “R” which was introduced by the physician, Krimas, during the reign (54 - 68 A.D.) of Nero Claudius Caesar (37 - 68 A.D.) to represent the power of the state over the doctor. Gradually, the sign of Horus was combined with that for Jupiter, in the “R” symbol still used on modern prescription pads (Marti-Ibanez, 1962).

**Medicine and art in the middle ages**

Illustrations were basic to medical texts in the Middle Ages (1100 - 1500), as in our own era. Soranus of Ephesus' (98 - 138 A.D.) "Treatise on Bandaging" (1st Century A.D.) was really a picture book. The very word - "anatomy" means "to cut up" but dissection continued to be subject to religious sanctions in the Middle Ages. There was a representation of dissection in the 1345 "Anatomy" of Guido de Vigevano. In the religious art of the Middle Ages there was great emphasis on Jesus Christ as Healer. In the 1450 "Grande Chirurgie" of Guy de Chauliac (1300 - 1368), an illustration of a post mortem examination appeared, apparently conducted in the deceased's bedroom. The physician appears in full canonical garb, and is assisted by three others. A vessel for reception of the viscera is portrayed. Magic, religion, astrology, astronomy and witchcraft were all mixed with the art of healing.

**Renaissance, medicine and art**

In the Italian Renaissance (1500 - 1700 A.D.) there was a true rebirth of Greek and Roman classical culture. Johannes de Ketham's "Fasciculus medicinae" (1491, 1495) with prints by the Venetian painter, Giovanni Bellini (1430 - 1516) and others is often judged one of the most beautiful of illustrated books. In the 1495 edition, there is a print by Bellini - "Visit to a Plague Patient". The print portrays a physician holding a sponge soaked with vinegar and spices to his nose, in the hope of warding off the bubonic plague which had ravaged Europe in the middle of the 14th century, killing half of its population (Black Death); attendants are shown fumigating the room with torches. It reflected the humanism of the Renaissance (Herrlinger, 1970).

In the interaction of medicine with art, the great figure of the Italian Renaissance was Leonardo da Vinci (1452 - 1519). He was a universal genius, anticipating development in many fields, including engineering and aeronautics. Renaissance artists, especially in northern Italy, became increasingly interested in the human form, and the study of human anatomy appropriately became a necessary part of the young artist's apprenticeship. Leonardo, however, was the artist to consider anatomy for reasons beyond its practicality in depicting the human form. He himself made anatomical preparations from which he produced drawings, of which more than 750 are extant, representing the skeletal, muscular, nervous and vascular systems. The illustrations were often supplemented with annotations

of a physiological nature. Leonardo's scientific accuracy was greater than that of Andreas Vesalius (1514 - 1564), author of the first modern medical text book - "De humani corporis fabrica libri septem" (1543), which the great physician, William Osler (1849 - 1919) called "the greatest book ever written, from which modern medicine dates". The foundation of this "greatest book" was actually laid in the anatomical drawings of Leonardo da Vinci. His artistic beauty remains unchallenged even today. He correctly assessed the curvature of the spine; he depicted the true position of the fetus in utero. The sketches were seen by only a few contemporaries (i.e. Michaelangelo, Durer ). Leonardo's anatomical drawings were published only in the mid-19th century and are now part of the collection of the Royal Library, Windsor, near London, England. Leonardo in his lifetime, as well as later, was regarded as a magician. Later commentators compared him to Johann Wolfgang von Goethe's (1749 - 1832) master-piece, Faust (1808, 1832).

Michaelangelo de Lodovico Buonarroti-Simoni (1475 - 1564) spent at least twelve years in serious pursuit of anatomical knowledge through personal dissection, especially at the cloister of Santo Spirito in Florence. His sculpture influenced Leonardo. Though 23 years younger than Leonardo, both Michaelangelo and Leonardo worked together on one joint project, never completed, and now lost, on murals of battle scenes for the Palazzo Vecchio of Florence. Michaelangelo's "Pieta";(now in St. Peters, Vatican, Rome, Italy) was completed in 1499, when he was 24 and Leonardo was 47 years old. Five years later, in 1504, he completed his monumental statue of "David" (now in the Academy in Florence, Italy). In both works - "Pieta" and "David", Michaelangelo showed a total understanding of human anatomy and, just as important, the ability to communicate that understanding. In his 30's he demonstrated his consummate skill in painting of the ceiling of the Sistine Chapel of the Vatican. The modelling of the figure of Adam, whose fingertip almost, but not quite, makes contact with that of God, is magnificent, as are all the other figures in this overwhelming, and yet intimate, composition. For both Leonardo and Michaelangelo, it was the frozen movement (capturing in an instant an entire sequence or process) that was of particular interest. The anatomical artist is required to design anatomical shapes, through a complex process of "selectivity and emphasis, based on sound anatomical knowledge..." (Hale and Coyle, 1977). Such is the lesson that we learn from masters such as Leonardo and Michaelangelo. Both were two giants of the Italian Renaissance.

Fra Angelico (a Florentine painter active about 1417 - 1455) portrayed "The Healing of Palladia by saint Cosmos and Saint Damian" brother physicians who were patron saints of the Medici family (1434 - 1494) of Florence and effected a miraculous cure. In "Saint Veronica" by Hans Memling (a Flemish painter around 1430 - 1494 A.D.) the veil with which Saint Veronica wiped the face of Jesus of Nazareth (3 or 4 B.C. - 30 or 33 A.D.) on the way to Calvary, which was thought to have miraculous healing powers, is represented. Jesus Christ (Jewish Messiah) - "Son of God" was executed by crucifixion under the order of the Roman Prefect (Governor) of Judea, Pontius Pilate (1st century A.D.), perhaps because of the unrest Jesus's activities were causing. On the reverse of the painting is a representation of the "Chalice of Saint John the Evangelist". The Chalice, too, was regarded as having healing associations, as legend goes, John having drunk poisoned wine from it and survived.

Rogier van der Weyden, a Flemish painter around 1400 - 1464 A.D. portrayed "Saint George and the Dragon" (1432 A.D.). St. George - a 3rd century Roman soldier, who killed the dragon terrorizing the town of Silenia, was also a protector against contemporary danger, like the plague. Hieronymus Bosch (1450 - 1516) portrayed in "Death the Miser" the struggle between forces of good and evil for possession of a dying man's soul. It could be considered as an anticipation of the Spanish surrealist artist, Felipe Jacinto Salvador Dali (1904 - 1989). The Master of Saint Gilles (Franco-Flemish artist active around 1500 A. D.) portrayed "Saint Leu Healing the Children". St. Leu, protector of mentally disturbed children and epileptics, is shown standing in front of a small church, which was the baptistry for Notre-Dame Cathedral in Paris, France. He blesses a group of people, including children, while in the distance a monkey-like demon departs from a man whom he has cured. In the art of this period as in the Antiquity and the Middle Ages, we find continued emphasis on magical and religious aspects of healing, while the scientific basis of healing was being established in the anatomical studies of artists like Leonardo and Michaelangelo. The German painter and engraver, Albrecht Durer (1471 - 1528) was entirely concerned with the aesthetic aspect of anatomy.

Anatomists in Europe, especially in northern Italy and southern Germany, gradually became aware of realistic representations of precise information. This is best represented by Jacopo Berengario da Carpi (? - 1530), author of "Commentaria Super anatomica mundini" (1521), who made the first anatomical illustrations made consistently from

nature. Caratender at Basle, Switzerland, published an edition of the anatomical works of Claudius Galen (130 - 201 A.D.) the “Medical Dictator” (Guthri, 1958) for 1200 years till modern times, which included figures, especially of osteology, rendered in a remarkably realistic fashion. As early as 1532 and through the next several years Charles Estienne (? - 1564) of the famous Etienne/Stephanus Printers family of Paris, was preparing a work which stressed a complete pictorial account of the human body.

### **Post - renaissance art and medicine**

Two great medical paintings of the Dutch artist, Rembrandt van Rijn (1606 - 1669) are representative of this period: “The Anatomy Lesson of Doctor Johan Deyman” (1656: now in them Rijks museum, Amsterdam) and “Doctor Nicolas Tulp Demonstrating the Anatomy of the Arm” (1632: now in Maurithuis, The Hague). Dr. Nicolas Tulp (1593 - 1674) was an important Amsterdam anatomist, hailed by his contemporaries as the “Vesalius of Amsterdam”. Dr. Johan Deyman (1620 - 1666) was successor to Tulp as praelector Anatomiae of the Amsterdam Guild of Surgeons.

The Philadelphia artist, Thomas Eakins (1844 - 1916) is now regarded as one of the greatest of American painters though virtually rejected in his own time. His painting - “The Gross Clinic - a Portrait of Prof. Gross” (1875) seems to have been inspired by the 1632 Rembrandt Painting of Dr. Tulp. The other Agnow Clinic - a Portrait of Dr. David Hayes Agnew”(1889) was the painting to honour a noted retiring professor of surgery at the University of Pennsylvania, on commission from his students. Both paintings are now the property of Jefferson Medical College in Philadelphia, where Eakins had studied anatomy and where Dr. Samuel David Gross was an internationally famous professor of Anatomy. In both paintings - “The Gross Clinic” and the “Agnew Clinic”, we have unidealized images which portray the inner thoughts and feelings of subjects and the atmosphere of a situation.

The medical painting of the American artist, Robert Hinckley (1853 - 1941) - “Who was who on Ether Day” (1882 - 1892) represents an event which occurred 30 years before his birth and was the first public demonstration of ether anaesthesia at the Massachusetts’s General Hospital in Boston on 16th October, 1846. Judging from documentary evidence, he may have taken artistic liberties, adding and deleting individuals in order to develop a powerful composition, and also saleable painting. Prints reveal a lot

about what people thought of doctors and medicine, things that would not be found in medical text books. The Spanish artist, Francisco Jose Lucientes Goya (1746 - 1828) made scathing portrayals of the practice of medicine in his time, in several prints, including the etching - "A Military Hospital" from the series - "The Disasters of War".

Portraits of physicians were, and are still today, very often painted. There are many paintings depicting medical themes. Norwegian artist, Edvard Munch (1863 - 1944) in 1894 portrayed-"The Sick Child" in powerful dry-point. The young girl is dying of phthisis - the disease from which the mother and the younger sister of the artist had died, and the bowed grief of the mother's head in the painting reflects Munch's own grief. In similar vein, 15 year old Pablo (Ruizy) Picasso (1881 - 1973) painted as his second large academic work a powerful rendition of "Science and Charity" in 1897. This painting, now in Museo Picasso in Barcelona, Spain, shows both the technical skill of Picasso and also his compassion. In the oil painting, a doctor (for which Picasso's father posed) sits by the bedside of a sick woman, taking her pulse. Her hand hangs limply over the covers, her skin is greenish-yellow. On the other side of the bed stands a nun (Sister of Charity) holding out a cup of water. A young child clings to the nun who holds her in her arms. Picasso viewed medicine as involving both science and charity (i.e. love). "Children's Doctor" (1949) of Andrew Wyeth is an imitation of Picasso's "Science and Charity". In "Children's Doctor" Wyeth portrays a moment in time when his son had been seriously ill and the doctor had come out for series of visits, often in the middle of the night.

In many ways, Leonardo established the basis of all the artistic anatomy of later generations. He presented theory as well as method, and in his drawings set a standard for all later artists. In "Anatomy Lessons from the Great Masters" (Hale and Coyle, 1977), five drawings by Leonardo appear. Leonardo's Michaelangelo (1475 - 1564) is represented by 17 drawings; Raphael - Raffaello Sanzio (1483 - 1520) by 10; Durer (1471 - 1528) by 9; Peter Paul Rubens (1577 - 1640) by 7; Rembrandt (1606 - 1669) by 5; Tiziano Vecellio Titian (1490 - 1576) by 2. No other artist is represented by more than one drawing.

### **Medical illustrations**

Medical illustration is a form of art which is both representational and conceptual. The anatomy and physiology of the human body are represented as accurately as possible.



At a conceptual level, there is selection and organization, highlighting and emphasis. Graphic techniques of modelling, shading, etc., are employed to convey ideas and not simply facts.; Leonardo established the techniques and convention of artistic anatomy which are still essential to medical illustration. In his drawings, Leonardo pioneered in the use of undershading to achieve a three-dimensional effect. He treated a part of the body systematically, from the inside to the outside, so that the relation between musculature, skeleton, internal organs and the surface of the body became dramatically clear. Medical illustration probably started in the 1st century A.D. In the 6th century Vienna Codex of the Roman physician pedarius Dioscorides (1st Cent. A.D.) of Anazarbus (now south east Turkey) on *Materia Medica* (around 60 A.D.) there is a picture book of medicinal plants. In those days, when nearly all medical prescriptions were made up of tinctures, extracts and infusion of particular parts of plants, it was important that they should be accurately identified. In *Albucasis'* (936 - 1013 A.D.) work on surgery (Cordoba 10th century), all surgical instruments were properly drawn so that the local cutler or blacksmith might make them. Surgical procedures. were also illustrated, so that they might be conducted properly.

Till 1495., "*Fasciculus medicinae*" was the best illustrated book that had appeared up to that time. However, progress continued. The year was 1543, the same year that Nicolaus Copernicus (1473 - 1543) published his epoch-making book - "*On the motions of Heavenly Bodies*".

As Copernicus initiated the Scientific Revolution (1543 - 1687: from the publication of his book in 1543, which ended with Isaac Newton's (1642 - 1727) "*Philosophiae Naturis Principia Mathematica*" published in 1687) and laid the foundation of modern astronomy, so did Andreas Vesalius' book - "*De humani corporis fabrica libri septem*" (Basle, 1543) establish the basis of modern anatomy, the study of the microcosm of the human organism. Both works, and the ideas and ideals they contained, were part of the revival of the Greek spirit of scientific inquiry in Europe, known as the Renaissance - the resurrection of learning.

In "*Fabrica*" all the parts of a dissected boy are illustrated in over 200 drawings. While there is controversy about who actually executed the drawings, the consensus is that Vesalius himself planned and designed the entire set. Draughtsmen from the Venetian painter, Vecellio Titian's (1490-1576) workshop may have carried them out, perhaps

under the supervision of Titian himself. In several sources, they are attributed to Jan stephan van Calcar (1499 - 1546/50) who probably also worked on Vesalius' earlier *Tabulae anatomicae sex* (1538). In any event, the woodcuts of the "Fabrica" and "Epitome" (The Summary) have been described as of 'noble style and inspired draughtmanship, a monument in the history of fine art'. The woodblocks were cut in Venice, and the book printed in Basle, Switzerland, then a centre of humanistic printing. Till 1935, almost 400 years later, woodcuts were still clear and sharp. Of course, the first printing started in 1454.

In Herrlinger's (1970) view, the "Fabrica" is the greatest of all books in the history of medicine - "the first and perhaps still the best example of a modern medical textbook illustrations that are not merely scientifically accurate, but artistically superb..... a hymn of praise to the harmony in God's supreme object of creation: Man "Amritasyas Putra" - son of the sublime in the Holy Upanishads (800 - 400 B.C.) - the last section of the Vedas)

Andreas Vesalius completed the book when he was only 28 years old - only 5 years after his medical graduation from the University of Padua. The day after passing his doctoral examination, he was appointed to the professorship of anatomy and surgery in the University of Padua, a post he held until 1543 - the year of the publication of the "Fabrica" and its condensed version - the "Epitome". Soon after their publication, Vesalius resigned his professorship at Padua, and spent his later years as court physician with Charles V and Philip II of Spain. In 1561 he wrote his last published book - a critique of Fallopius' "Observationes anatomicae". After that, his career is obscure. In early 1564, he appeared in Venice, on his way to the Holy Land. On the return trip, he fell ill with plague/fever and died at Zante in Greece in the same year at the age of 50.

Anatomy by Henry Gray (1827 - 1861) published in 1858 (English Edition - American Edition in the following year) contains 363 engravings on wood; its American centennial edition of 1959 still had 211 of the original 363 drawings.

William Rimmer's (1816 - 1879) "Art Anatomy" (1876) combines formal anatomical studies with eloquent emotional expression. Arthur Thomson published "A Handbook of Anatomy for Art Students" in 1896.

### **Art and psychiatry**

Art is used as a diagnostic tool in psychiatry. The whole development of projective techniques such as the Rorschach ink-blot test or the Thematic Appreciation Test (TAT) rests on the assumption that individuals will project inner processes on to relatively unstructured ambiguous materials. Both the tests are useful for the diagnosis and treatment of schizophrenics.

### **Art and the artist**

For the Dutch Artist Vincent Van Gogh (1853 - 1890) the struggle with emotion was intense and the outcome tragic. He committed suicide at the age of 37. For him, life was a constant struggle. He struggled with turbulent emotions within and with obstacles outside. His painting - "Ravine in the Peyroulets" (1889), a year before his death, portrays both the inner split which Van Gogh experienced, and at the same time mountain in the centre, which he saw as a looming obstacle, preventing passage. Like Rembrandt, Van Gogh sought to understand himself through many self-portraits - 40 painted or drawn in less than 5 years. The artist agonized over the question: "How can I make myself useful, what end can I serve?" (Leymarie, 1977). He deliberately painted the portrait of his physician, Dr. Gachet, in the same spirit, and with the same intensity, as his own last self-portrait in 1890.

The Spanish artist, Pablo Picasso, was more interested not in himself but in what was going on in the contemporary society. A cultural schizophrenia is expressed in many of his paintings, including his powerful epic of his artistic genius - "Guernica", which he painted in Paris, May 1 - 4 June, 1937, as his response to the fascist German bombing of the Basque town of Guernica, Spain. All the horror of war and destruction were represented. The broken shattered bodies and anguished faces of man and animals represent Picasso's scream of despair in response to what he sensed going on. Picasso through his art is aiming at a personal comprehension, as a basis for healing the splits within his own personality. Picasso in his paintings such as "Guernica" (1937) and "Charnell House" (1945) expressed his horror at the irrational cruelty of the time. Picasso, in "his versatility, technical brilliance and imaginative depth, has not been surpassed in this or probably any other age" (Osborne, 1970). After all, he was a Marxist at the core of his heart, he was a social realist.

**Art and therapy**

Art is also used as therapy (The American Journal of Art Therapy; Landgarten, 1981; Wadson, 1980).

William Blake (1757 - 1827) was engaged in a spiritual enterprise \ in his "Songs of Innocence" (1789) or in his later engravings of the "Book of Job" or the "Divine Comedy", whose essence consists of precise delineation of reality in a manner only revealed in a visionary mystical imagination.

Art is an holistic experience at many levels. Therefore, in the rediscovery of holistic medicine in modern times, art can perform an important function for the physician.

**The epilogue**

In anatomy, the artist contributes to medical research through portraits of anatomists, records of individual dissections and anatomy book illustrations. Van Gogh made portraits of his doctor while undergoing treatment. Artists like Bellamy, Durer and Hogarth documented the personal responses to their own ill-health or the suffering of someone close to them and also the theme of mental health in general. Artists have recorded medical care in war for many centuries. Callot, Goya, Bell and Shepperson illustrate the atrocities of war, specific battle injuries and the advances made in the management of war wounded.

Artists also record the relationship between religious imagery and illness. Individual saints were attributed with miraculous healing powers and linked to specific diseases over the ages that provide artists with a rich source of themes. In caricatures, artists also make fun of educated physicians, unscrupulous quacks and the patients who suffer from their 'cures'. To sum up, the links between medicine and art are continuing to develop in a creative way in the contemporary world.

In all this, the Virtues which Keats affirmed are evident: beauty and art. Truth provides the scientific basis for the practice of medicine. But there is also a beauty involved: the beauty of disciplined skill; the beauty of dedicated character; the beauty of a faith which recognizes that a healing power is at work beyond that of the physician. Medicine and art: the two are two flowers in the same bud.

Between the sixteenth and nineteenth centuries, the interrelation of medicine and art was frequently displayed in prints. This medium has not only supplied a greater plurality of subjects than any other, but throughout its existence has served as a vehicle of information as much as artistic expression. Some prints are simply scenes of their times recorded by artists. In others, the artistic purpose concerned accurate documentation of existent levels of knowledge for both scientific and artistic use.

At the turn of the nineteenth century, the Spanish artistic genius, Francisco Goya, produced a series of wildly imaginative aquatints entitled *Los Caprichos* (The Caprices). Produced in the midst of intense political and social upheaval, the series satirically addressed the hypocrisy and corrosiveness of European mores and institutions. In his *De quemal morira?* (Of what ill will he die?, 1797 - 1798, Goya strives to puncture the bubble of pretense that, in his view, had infiltrated the European medical profession.

From a contemporary standpoint, art and medicine appear to reside at opposite ends of the intellectual spectrum. One discipline inhabits the world of reason; the other, the world of the imagination. Yet, there existed for centuries a complex interrelationship based upon cultural interpretation between man, medicine, and the visual arts. Works of art are produced within the framework of the artist's experience and times. However, since each individual dwells within the confines of the human condition, artistic representation of medically related subjects provides a universality of meaning that transcends time and place.

Acute power of observation is the creed of all creative artists. William Blake's (1757 - 1827) poetic words, though written in a different context, give the right expression:

“To see a World in d Grain of Sand,  
And a Heaven in a Wild flower,  
Hold Infinity in the palm of your hand,  
And Eternity in one hour.”

(AUGURIES OF INNOCENCE - FIRST STANZA)

Objects of beauty and art sing synchronously in the artist's mind. Imagination and innovation guide the artist's brush to make painting creative, genuinely expressive and intellectually reflective and stimulating. Beauty never betrays what is best in an artist; truth always triumphs in his creation.

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## सारांश

### आयुर्विज्ञान एवं कला - एक एतिहासिक दृष्टि कोण

सिसिर के. मजुमदार.

मनुष्य के निपुणता की एक अभ्यास है कला कभी कभी स्वभाविक संसार को कल्पना करके अभिव्यक्त करना कई प्रकार की होती है। जैसे शब्दानुसार एवं दृश्य। आयुर्विज्ञान और कला चिकित्सक के जीवन एवं कामकाज में प्रभाव डालते है। विज्ञान और रोगों को ठीक करने की कला कई प्रकार की होती है। इस कारण से अभिव्यक्त करने की पद्धति को कला कहते है। विवरण यह प्रस्तुत किया गया है।