

art & man

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LEONARDO

DRAWING FACES

THE HUMAN MACHINE

**"I wish to work
miracles."
Leonardo da Vinci**



Annunciation (detail), c. 1472. Uffizi, Florence. Scala/Art Resource.

HEREFORE, TO obtain a true and perfect knowledge, I have dissected more than ten human bodies. I have not been prevented by lack of skill, patience, perseverance, loathing, or even by fear of spending the night in the company of corpses quartered and flayed and horrible to see, but simply by want of enough time."

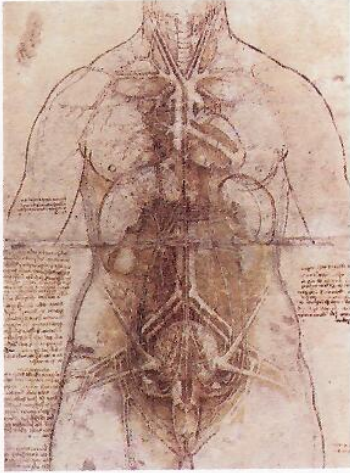
The tall, bearded man had to work quickly and at night, making sure he wasn't seen, for he knew what he was doing was against the law. By day, he would haunt the hospital or the scaffold where public hangings took place. Finally, when he had obtained what he needed, he would arrive in his studio before dawn with his gruesome load. He knew that there wasn't much time before the smell became unbearable, so he immediately picked up his surgical instruments and began his work. "I pulled back the skin on a great confusion of veins, arteries, nerves, tendons, muscles, and bones, all red and sticky with the blood that

In his search for the perfect face (above), Leonardo did hundreds of anatomical drawings (above, right).

makes everything look the same."

Does this sound like something from a horror film? What kind of person would do something like this, and why? And how do you think the same person who cut up human corpses and carefully drew every step (see drawings above right) could at the same time do the beautiful painting of a perfect figure kneeling in a heavenly garden (above, left)?

As you might have guessed, we've been talking about Leonardo da Vinci, the artist, inventor, architect, engineer, musician, and scientist. The son of a middle class landowner with 12 children, Leonardo was born in 1452 in a small Italian town outside of Florence. The boy soon showed such talent that his father sent him to the city to study in an artist's studio. Leonardo was in the right place at the right time. Florence was the center of a very exciting and creative period (1400-1600) known as the Renais-



Internal organs, 1487. Royal Library, Windsor Castle.



Eye, 1503. Royal Library, Windsor Castle.

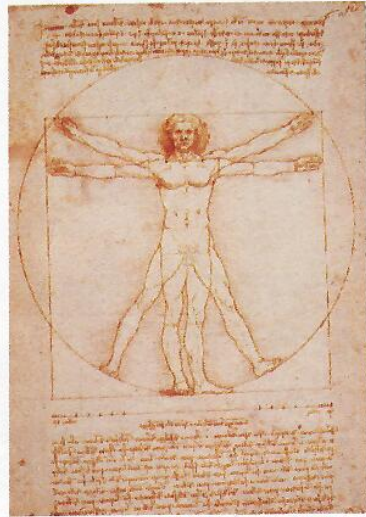


Skulls, 1489. Royal Library, Windsor Castle.

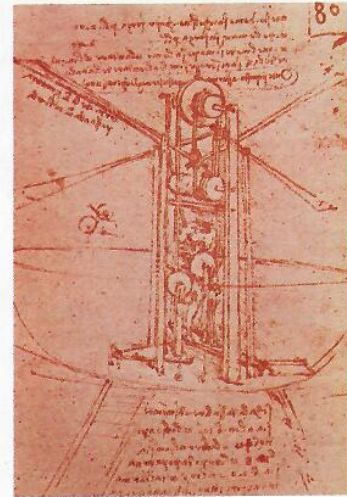
Leonardo thought of the human body—organs, eyes, skull muscles, proportions—as a machine like his helicopter and car, below.



Shoulder muscles, 1510. Royal Library, Windsor Castle.



Proportions of the figure, 1506. Academy, Venice. Scala/Art Resource.



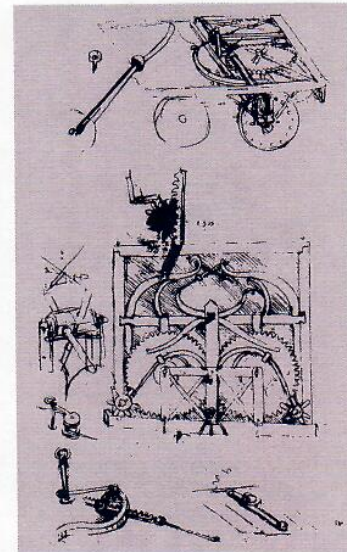
Man in flying machine, 1488. National Library, Paris. Scala/Art Resource.

sance (a renewed interest in learning, the arts, and science). Artists no longer wanted to copy old ideas, but to discover brand new ways of painting the world around them. In order to accurately represent reality, Leonardo and others began to think of art as a science. They believed that there was a mathematical formula for beauty which they could discover if they observed and drew everything they saw carefully enough. In fact, one of Leonardo's first paintings (above, left) is of a perfectly proportioned figure.

Throughout his career, Leonardo began many projects—sculpture, paintings, buildings—most of which were either never finished or were destroyed. During the middle of his life, he began to keep notebooks (see examples above, right), in which he jotted down every idea that came into his mind—how birds fly, how water runs, the structure of rocks, how plants grow, how the body works. He made over 7000 pages of drawings, many anticipating modern devices that wouldn't be developed for hundreds of years—automobile, helicopter, submarine, airplane. These

sketches were accompanied by many notes, written backwards so they could only be read when held up to a mirror.

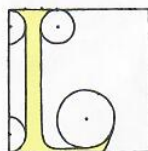
In the following pages of this issue, you'll learn more about the life and art of this strange, mysterious genius, including how he created the most famous face in the world, that of the *Mona Lisa*; you'll meet other artists who work with the human face, including a 17-year-old portrait painter, and finally, you'll learn the "formula" for the ideal face by doing an "old master" portrait of your own.



Mechanical car, 1490. Ambrosian Library, Milan.



THREE FACES OF LEONARDO



LEONARDO SPENT much of his life searching for ideal beauty. According to a contemporary, he had only to look in the mirror to come very close, "for his own beauty could not be exaggerated and his every movement was grace itself." When he was young, he might have looked a little like the angel in the detail (bottom, right). But this face is not a portrait—the features are too regular (check its "proportions" with the diagram on page 14). And compare it to the portrait of the *Mona Lisa* on pages 8-9. How is it different? Can you find two other "ideal" faces by Leonardo in this issue?

Just as one side of Leonardo tried to find the perfect face, the other side of the artist—the one

At the end of his life, Leonardo did this realistic portrait of himself as a discouraged old man.



Old man, Royal Library, Windsor Castle.

**"Imagine everyone
with a perfectly
proportioned face
—it would be impossible
to tell people apart.
Fortunately, though
there is a universal size,
one can clearly
distinguish one face
from another."**

Leonardo

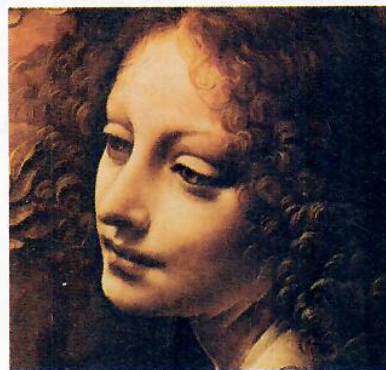
that led him to dissect human bodies—sought out grotesque and distorted features. Leonardo was also fascinated with the other side of beauty, and did many drawings like the one (facing page) in which features and proportions are exaggerated almost to the point of caricature (although Leonardo had no intention of making fun of his subjects as a caricaturist or cartoonist might—he just drew what he saw).

A third kind of face (a portrait) is somewhere between the ideal and a caricature. Since no one's features are perfect in every way, the differences between the ideal face and a real one are what gives it character. Capturing those differences makes the portrait *look* like its subject. Look carefully at the *Mona Lisa*. Do you notice anything unusual about her eyes? (she has no eyebrows, but heavy lids on

top *and* bottom). Her forehead is very high and her chin small and rather pointed.

What about the third face on this page (bottom, left)? It is a portrait of Leonardo himself, sketched around 1516. At this point he had left Italy to live in France. In his whole life, he had done less than a dozen paintings, and many were either unfinished or ruined (all are considered masterpieces today). He had spent 16 years on his greatest work, a huge sculpture, which had been destroyed. And he had published nothing—he wasn't even able to put his notes in order (his now famous notebooks would not be published for another 400 years). One of the last entries he made before his death in 1519 was, "Tell me if anything at all was done."

The artist was much younger when he painted the perfect, idealized face shown below.



Virgin of the Rocks (detail of angel), 1482-83. Louvre, Paris.

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MODERN FACES



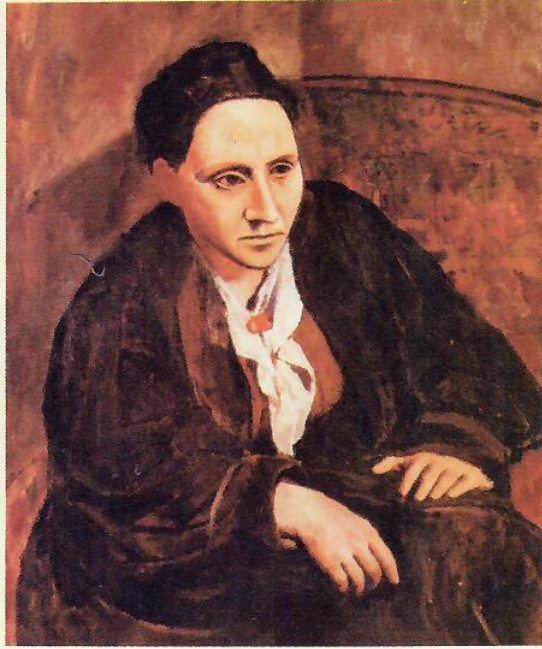
**"A face is not well done
unless it
expresses a state of mind."**

Leonardo

PORTRAITS OF AN ARTIST

Both the drawing above and the painting on the right are of the same person, but were done by two different artists. Which work might look more like its subject actually did? Which do you feel the model might have liked better?

American writer Gertrude Stein, who lived at the beginning of this century, was known for her



Pablo Picasso (1881-1973). *Portrait of Gertrude Stein*, 1905-6. The Metropolitan Museum of Art, NY. Bequest of Gertrude Stein.

poetry, her support of artists, and her stocky appearance. When Spanish artist Pablo Picasso was painting her portrait (above) he had her pose for it 80 or 90 times. Finally, he gave up, painted out the face, and put the painting aside. Months later, he finished it in less than an hour. People who saw the portrait expected something more realistic and detailed—they objected to the simple, angular, mask-like face. Picasso said, “Everyone thinks the portrait is not like her but never mind, she will come to look like that in the end.” The long, straight nose, the severe mouth, thoughtful eyes, and the dark, massive figure that fills the canvas, perfectly captured Gertrude Stein’s poetry and personality. And the portrait certainly seemed to please Stein herself who said, “For me, it is I.”

Contemporary American caricaturist David Levine saw the famous writer in another way (see drawing at left). Gertrude Stein was known for her aggressive nature—her friendships with Picasso and other artists seemed to end very abruptly. Levine has emphasized Stein’s overpowering personality by making her body huge, and her head small with a tight, stubborn mouth. Her great size seems to symbolize the way she protected, yet tried to smother and control her artistic friends.

Elizabeth Catlett (b. 1915). *Sharecropper*, 1975.



A NOBLE IMAGE

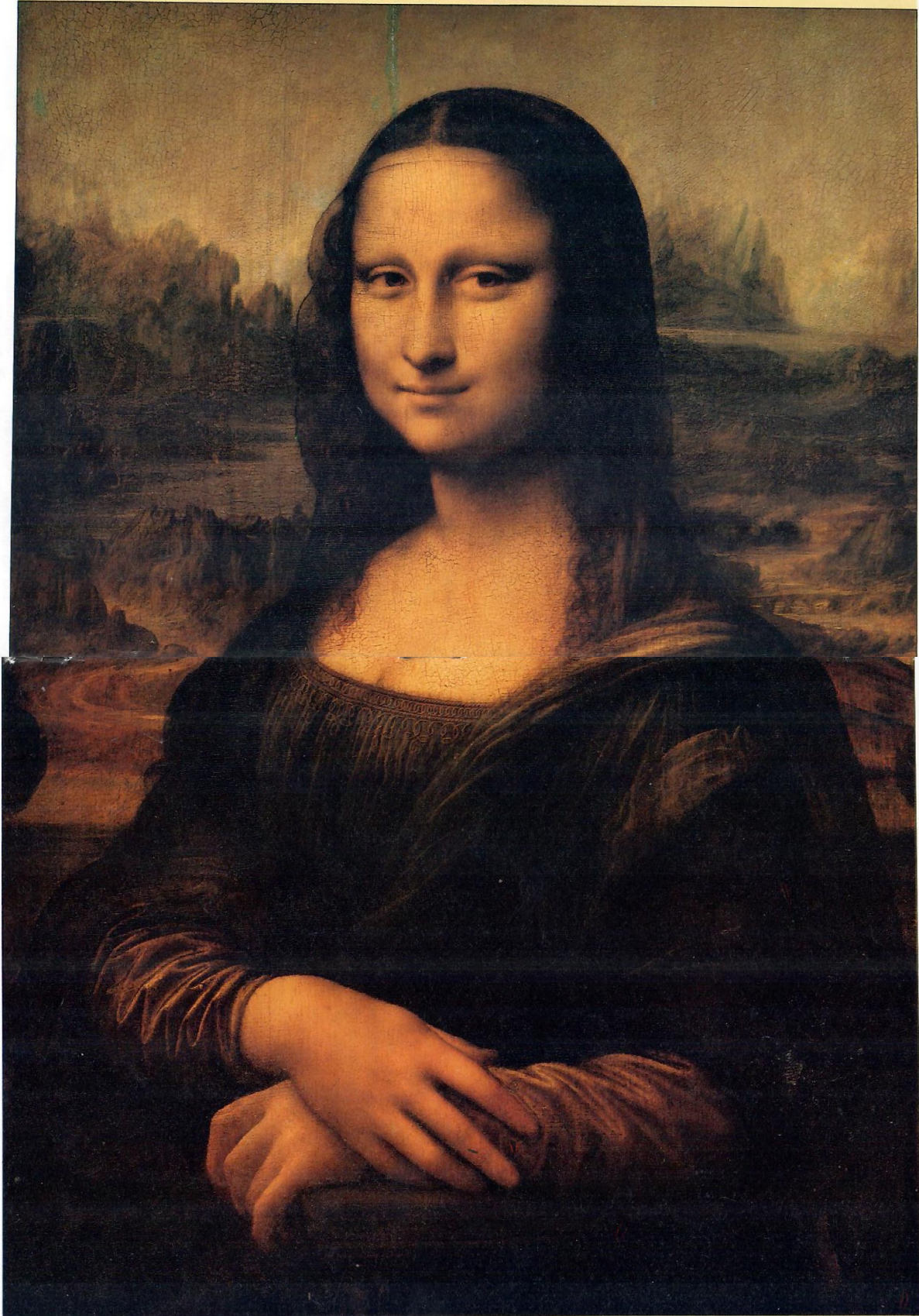
We’ve seen a portrait of Gertrude Stein showing her as she “really” was, as well as a *caricature* exaggerating her character. However, artists can depict people in many ways. How do you feel when you look at the woman in the print above? Does she look mean or funny or frightened? American artist Elizabeth Catlett stresses the noble and heroic side of her figures. The artist has said, “I have always wanted my art to stimulate and make us aware of our potential.” This farm worker might be poor, but her proud, idealized face fills the frame. And the artist has shown her from below, so we seem to be looking up at a very tall, heroic figure. And what about the large hat that encircles her head? Do you think the artist might have meant to suggest an angel’s halo?

LEONARDO DA VINCI



ART & MAN MASTERPIECE OF THE MONTH #ONE

Leonardo da Vinci (1452-1519), Mona Lisa, 1503, Louvre, Paris



MONA LISA

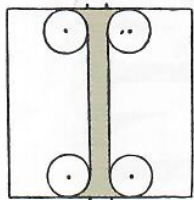
“Make your portrait at twilight or in clouds or mist.
Works painted then have more insight,
and every face becomes beautiful.”

Leonardo da Vinci

MASTERPIECE OF THE MONTH # 1

MONA LISA

Arno Landscape, 1473. Uffizi, Florence.



**“Consult nature
in everything
and write
it all down.”**

Leonardo

IF YOU WERE TO NAME THE BEST-KNOWN painting in the world, what would it be? If you chose the *Mona Lisa* (above, right) what do you think might be its most outstanding feature? From the minute it was created, this painting was famous. It has been the subject of thousands of songs, poems, books, products, ads, and even other works of art. The work is not very large or detailed. The pose and composition are not unusual—a figure set in the middle of the frame, looking out at the viewer. Then just what is it about this image that has made it a legend for nearly five centuries?

“Madonna” Lisa del Giocondo was the second wife of a Florentine merchant. When her husband Francesco asked Leonardo to do Lisa’s portrait, he probably wasn’t very hopeful. The great artist was working on a huge mural and was also very involved in his mathematical studies, as well as making plans to redesign the city. Besides, it was well-known that he didn’t like to do portraits.



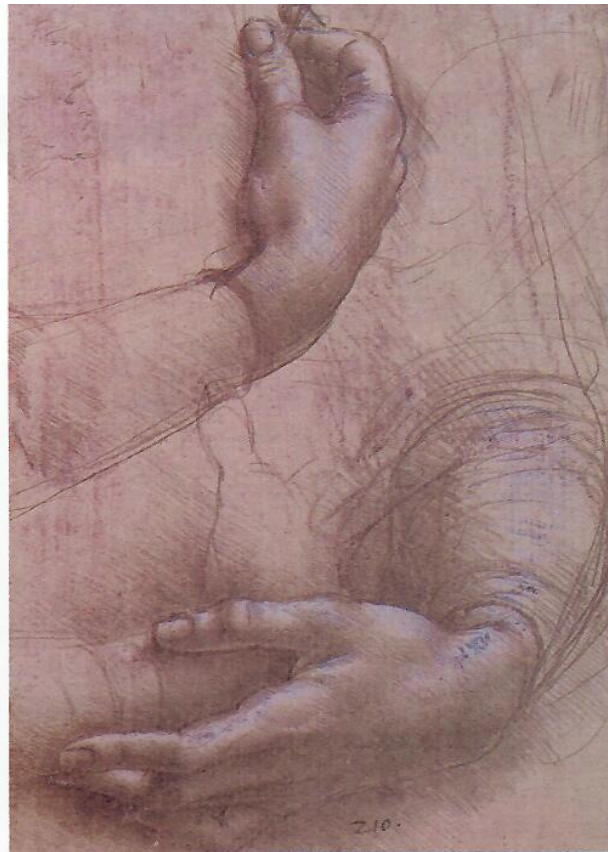
Gentile da Fabriano (c. 1360/70-1427), *Madonna and Child*, c. 1422. National Gallery of Art, Washington, DC., Samuel H. Kress Collection.

To Francesco's surprise, when Leonardo met Lisa he agreed to paint her, refused other commissions, and spent the next three years on the portrait (working in his annoying way—painting intensely for days, disappearing entirely, then showing up at inconvenient times to add a few strokes).

It is said that Leonardo filled the house with musicians and acrobats to amuse Lisa and change her "sad" expression. He posed her on a balcony (the original columns on each side were later cut off) to contrast her form with the landscape in back. Unlike earlier artists working before the Renaissance (see the *Madonna and Child*, below left), who painted figures in standardized poses, Leonardo worked directly from the model. He then made quick sketches (see drawings of heads, below, right) using the Renaissance device of *foreshortening*. Compare *Mona Lisa's* hands, which look as though they are actually in front of her, with those of the very flat, two-dimensional figure in the early painting. The artist made *perspective* drawings (top left) for the landscape in the background. Contrast the landscape in the *Mona Lisa*—the hazy mountains that seem to disappear into the distance—with the flat background in the earlier work. Then Leonardo did *shaded* drawings of each small detail (such as hands, above right) to suggest roundness of form. Later, he used hundreds of transparent layers of paint to *model* the *Mona Lisa's* solid, real-looking figure. Finally, he composed the entire painting, measuring to make sure the *proportions*, or sizes of the parts of the body, were true-to-life. How accurate do you think the proportions of the child in the early painting are?

The Renaissance techniques Leonardo used to make the *Mona Lisa* look realistic were certainly effective, but this doesn't explain why the painting has fascinated people for centuries. Like all great art, *Mona Lisa* seems to mean something different to each person who sees it. Some people find her tender and beautiful, others cold and strange. Her face seems to grow out of the shadows of the wild landscape in back, filled with cliffs, caves, jagged rivers, patches of sunlight, and shadows. Do you notice anything strange about the background? (it is much higher on the right than on the left) This brings your eye to her eyes, then to her famous smile, but how does it make you feel? And is *Mona Lisa* really smiling? Try covering the right side of her mouth. Perhaps her puzzling expression represents the inner mystery of human emotion. Maybe Leonardo meant to capture that brief instant just as a secret thought crosses the mind, and starts to show itself in the eyes and mouth.

The artist himself was also fascinated with his creation. After three long years in 1503, he finally left Lisa Giocondo's house. But Francesco never got a portrait of his wife after all. Leonardo took the *Mona Lisa* with him and worked on it from time to time for the rest of his life.



Study of hands, c. 1474. Royal Library, Windsor Castle.

Leonardo did detailed preparatory drawings of every element in the *Mona Lisa*, such as the landscape at the left and the hands, above.



Study of women's heads.

The artist probably began by sketching *Mona Lisa* from many different angles before selecting her final pose.

Jennifer Williams

PORTRAIT ARTIST



Good portraits are dramatic. Something is revealed about the person and something is left hidden. The best ones, like this portrait by 17-year-old Jennifer Williams, remain mysterious. Who is this girl? Why won't she look at us? What troubled dream has made her seem to turn inside herself? What is the secret of this portrait's power?

When we visited Jennifer at the North Carolina School of the Arts in Winston-Salem, she told us how she created this Scholastic Art Award winning portrait. She feels that the night she did it was one of the most "traumatic" of the entire year, and in this interview you'll find out why. Currently she's on a full scholarship to Cooper Union in New York City.

How long have you been interested in art?

All my life. When I was younger, I'd doodle imaginary faces—princesses and things like that. As I got older, I'd copy photographs and sketch my family sometimes. I always knew I would be an artist. Then, in my junior year I came here, to the North Carolina School of the Arts. And I guess what this school has taught me more than anything else is about *involvement*—about putting passion into your work.

How did you do this drawing?

It came out of a drawing class in which we were working from live models. One night my teacher called an extra class. The model was a ballet dancer, very thin and graceful, and she had wonderful hair that went all over the place. He had her wear a costume, made her up so she looked even more exotic, and used dramatic lighting.

Did you do any preparatory drawings?

We began by doing a series of two-minute gesture drawings. Then we did some longer ones, like this one (left), which took about ten minutes.

How did you do this drawing?

I started by lightly mapping in the basic formula for the face. And that depends on the particular proportions of the person's face I'm drawing. For example, does the person have widely spaced eyes or narrow ones? I also try to get a sense of the overall gesture of the figure, the way it's leaning and so on. After I have this down, I go in with a heavier line to indicate the details. And then I do the shading. I guess it's a pretty universal approach.

What did you find interesting about this model's looks?

She has a very narrow, beautiful face, a prominent nose, and very dark, exotic looks. She looked very elegant that night, as if she were going out to an opera. She was very dramatic, even a little haughty with her poses.

She sounds like a good model.

She was. But I'm afraid it was not a good night for me. I was so angry with myself after this class. I was out in the hall and even my teacher noticed. He said, "It's the only time I've ever seen you lose it."

I just couldn't get what I wanted that night. There was an awkwardness about my drawings I



Photos by Janet Soderberg

hated. In this one, the shoulder really seems off-balance and I don't like the folds at all. I *knew* what I wanted, and I knew I could do it, but it wasn't happening and it was driving me crazy. I felt I had reached a point where I wasn't growing anymore.

This is the only drawing I did that night that was even vaguely successful. I do like parts of it, but it still makes me feel badly.

What makes you keep doing art, despite the frustrations?

I've never really considered anything else. Winning awards and scholarships—there's that kind of satisfaction. But that's not the most important thing. I guess you do it for those time when everything clicks. Then it's just wonderful. But it doesn't happen very often.

It's kind of scary to be in art. It's so competitive and so chancy in terms of success. And in fine arts, just being able to support yourself can be a problem.

What do you like about drawing faces, in particular?

In a face, you can see what a person's all about—their looks, their personality, even their spirit. If you can capture someone's spirit, then you've really done something.

My teacher gave us an assignment: go to the mall and find an interesting face. I looked for people I felt some sort of empathy for. I find it hard to actually approach strangers, but you can learn a lot by watching. The mall seems to bring out a million different sorts of people.

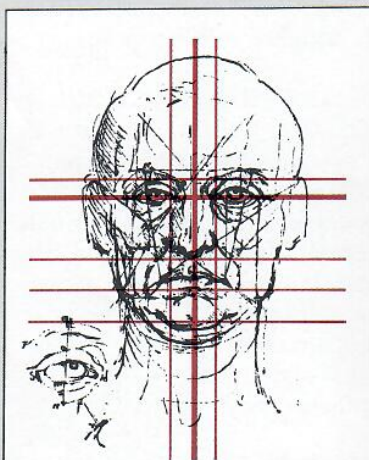
Could you offer our readers any advice about drawing people?

For getting the technical side—like anatomy and proportion—you can use books and photographs. You have to understand the basic structure of the face before you can distort it to create a mood.

But in the end, there's nothing that can beat drawing from direct observation. It has to do with going beyond the surface, which you can't really do if you use a photo. Photos have only two dimensions. Something's missing—what you get from actually seeing, feeling, touching, and smelling the thing you're looking at.

Creating an Old Master Portrait

"Know the proportions in human beings and other animals and learn the forms of all things on the earth. The more you know, the better you will paint."
Leonardo



Leonardo's Ideal Face
Head is oval, slightly larger at the top—eyes center in this shape. Bottom of nose is halfway between chin and eyes. Bottom of mouth is halfway between bottom of nose and chin. Eyebrows line up with tops of ears.

Renaissance artists were able to paint faces which so captured a person's personality that their portraits have seldom been equalled. Leonardo and the other Renais-

sance painters created these portraits by using great skill and careful observation. They

also developed some new tools to help them work. In this workshop, you'll learn to use two Renaissance systems artists still rely on today—*modeling and proportion*.

Prepared by Ned J. Nesti, Jr., Morrison High School, IL. Photos by Janet Soderberg.



MATERIALS

- 12" x 18" manila paper
- Ebony pencils
- Vinyl erasers
- Paper stumps (rolled paper)

STARTING OUT

1 Compare Leonardo's "ideal face" (above) with an actual person. How do the "real" features and their relationships to one another differ from the diagram?



2 Do some *blind contour* drawings of a classmate. (Imagine your pencil is touching the face. Now, without looking at the paper, imagine you are actually moving your pencil around the face). Use the diagram to help with the sizes and relationships of the features. Work large to fill the page.

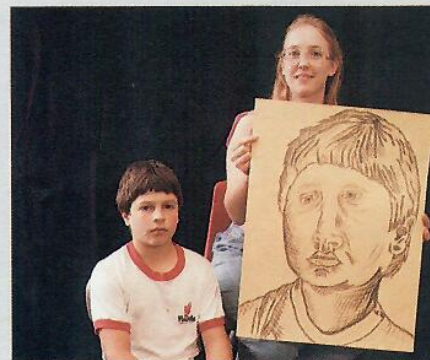
SOME SOLUTIONS

The lines you use should reflect the kind of surface they describe—they can be flat, curved, thick or thin, short or long, or you can build a three-dimensional surface with dots. You could also create solid areas of highlights and shadows, blending and soft-



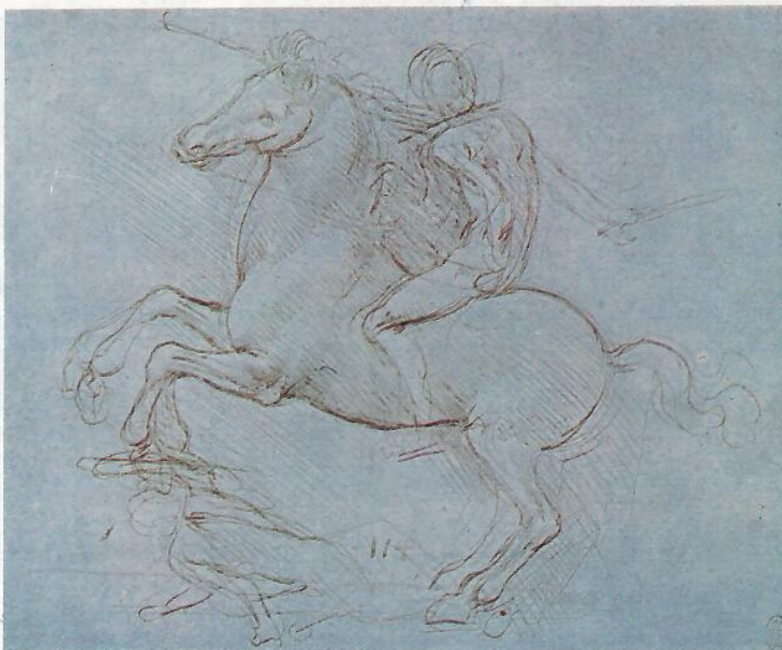
3 You can make your drawing look more solid and three-dimensional by *modeling*—highlighting the light areas and shading the dark ones. Try using some of the shading techniques shown above—lines, dots, various kinds of crosshatching, wash, or even random scribbles.

ening the edges with your hand or a paper stump. You might model your drawing using random scribbles, darkening some parts for emphasis. Usually light areas seem to come toward the viewer, while dark ones look as though they are receding. You can also develop a system of *crosshatching* to make your portrait look three-dimensional.



LEONARDO'S HORSE PORTRAITS

In this issue, you've seen how Leonardo da Vinci was able to draw such lifelike human faces. Now a new traveling show will give you a chance to see 50 rare drawings (right) by the great master of another of his favorite subjects—horses. *Leonardo's Drawings of Horses* will be at the Museum of Fine Arts in Houston through Oct. 13. The exhibition will then go to the Fine Arts Museum of San Francisco from Nov. 9, 1985—Feb. 26, 1986.



Leonardo da Vinci (1452-1519). Horse drawing. 1490. Windsor.



Bichitr. *Portrait of Jahangir*. 17th Century. Freer Gallery of Art, Washington, DC.



Georges Seurat (1859-91). Drawing of a man lying down. 1883.

PORTRAIT OF INDIA

This fall, the country of India will be coming to the USA. For the next year, all aspects of Indian art and culture will be celebrated at museums throughout this country. You can see shows of Indian fantasy paintings like the one above at the Freer Gallery, Washington, DC., now through Nov. 30; the Cincinnati Museum, Sept. 5-Oct. 13; and the Metropolitan Museum, New York City, Sept. 14, 1985-Jan. 5, 1986. Sculpture shows, film festivals, and musical performances will be held during the year in many additional cities. For more information write: Indian Embassy, 2107 Massachusetts Ave. NW., Washington, DC., 20008.

PORTRAITS IN BLACK AND WHITE

Leonardo drew mainly with *lines*. The French Impressionist artist Georges Seurat rarely used line at all. In fact, in the portrait above, can you even find the figure of a man? You'll learn more about Seurat's famous paintings and unusual techniques in next month's issue of *Art & Man*. In the meantime, you can see some of his drawings as well as more by Leonardo da Vinci and artists such as Rembrandt, Cezanne, and many others in the exhibition *Leonardo to Van Gogh: Master Drawings from Budapest* currently at the Art Institute of Chicago. The show will then travel to the Los Angeles Museum of Art, Oct. 10-Dec. 8.