SPECIAL FEATURE ON WALT DISNEY

WORKING WITH ANIMATION
A NEW KIND OF MOVIE

In 1937, America was still feeling the effects of a Great Depression — money was scarce, and a lot of people didn’t have jobs. And so movies became many Americans’ favorite escape. They crowded into huge, ornate movie “palaces” to watch newsreels, cartoons, and Hollywood fantasies filled with glamorous stars. But the latest sensation was an entirely new kind of movie. Part musical, fantasy, comedy and romance, all the actors were unknowns — there wasn’t one star. In fact the real performers were the hundreds of animators who had created five million drawings for the first full-length animated film.

Known as “Disney’s Folly” before its release, this movie was years in the making and had gone six times over its budget. Walt Disney, the young master or “Mousetro” (as he was called in Hollywood) of animated cartoons, already was known for his costly, adventurous projects, but this time most people thought he had gone too far. Who would want to see a cartoon that ran over 70 minutes, especially one based on a fairy tale? But as it turned out, Disney’s gamble, which he called Snow White and the Seven Dwarfs, was a tremendous overnight success. Most critics raved, and as one of them put it, “Audiences laughed, trembled, and cried at animated drawings so real they seemed like life itself.”

How did Disney do it? How did he expand the seven-minute cartoon that was usually shown with a movie feature and turn it into something as rich and moving as a live-action story? In many ways the Disney studio was like a scientific laboratory in

Can you think of some faces you’ve seen so many times — on TV and magazine covers — that you could identify them instantly? If you had been around in 1937, you would have immediately recognized the famous faces shown on these two pages — Snow White (left), the Seven Dwarfs (below, right), and their creator, Walt Disney (above, right).
which whole new drawing problems were solved. How do you animate water moving in a stream? How do you make a painted background look real for the camera? How do you give seven cartoon figures seven different personalities?

At the heart of his films were their funny, sympathetic characters, and Disney, a perfectionist, wanted each to be just right. Disney rarely did sketches himself. His gift was communicating his ideas to others and inspiring them to work together as a team. And it was his vision that shaped the characters of the dwarfs. At story conferences he would seem to become each of these little men — marching and gesturing like one, yawning like another — until his artists could form a picture of each. The hard part was drawing figures which expressed these different qualities, and Disney was a severe critic of their sketches.

In the case of Snow White and the Seven Dwarfs, Disney was looking for characters that could symbolize human emotions, like happiness, foolishness, insecurity, grouchiness. And he paid special attention to staging dramatic story situations that would emphasize these characteristics. In the scene (below, left) the focus is on the top figure, Dopey, who stumbles up the stairs, full of curiosity, and foolishly rushing into possible danger. He is the perfect symbol of childish emotion. Meanwhile, the other characters, fearfully (look at their staring eyes, and small round mouths) seem to throw up their hands in dismay, pleading with him not to go on. The high dramatic angle makes them seem even smaller and more afraid. The candlelight throws dark, threatening shadows on the wall and directs our attention to the huge, carved door on the right. Every background detail has been carefully painted to give just the right blend of humor and suspense.

Film animation (or making a drawn image appear to move) requires a special set of skills. First, the artist needs to have a knowledge of character and movement. Each drawing is a very small step of action done on a sheet of clear plastic, or cel. To have impact on the screen, every drawing must be bold, simplified, and exaggerated — almost like a caricature. Later each cel is photographed, and when they are all put together and run through a movie projector, they create a feeling of motion.

The first animated drawings appeared in 1907, around the time ‘‘nickelodeons’’ — the first movie houses — became popular across the country. As people continued to flock to the movies in the Teens and Twenties, there was a ready market for lively, animated cartoons. Walt Disney saw big possibilities in this new medium, and in just 10 years he took animation from crude, jumpy, silent shorts to full-length movies that flowed with lifelike movement. The Disney studio developed the first sound cartoon, the first color cartoon, and a series of ‘‘silly symphonies’’ — experiments in abstraction, musical tone, rhythm, and animated motion that were as exciting as the best music videos being done today.

Disney’s love of movies and cartooning went back to his childhood in Missouri. Born in 1901, he found drawing to be more than child’s play. It was an escape from all the hard work he had to do for his father — a stern, humorless man who seemed to fail at every business he started. Disney also loved performing and, with a friend, put on a child comedy act at local theaters. His father hated anything to do with entertainment, so Disney had to sneak out his bedroom window on performing nights.

When he was 18, Disney found work doing primitive ‘‘commercials’’ which were shown in Kansas City movie theaters. At 21, he left for Hollywood to make films. By 1927, he was working for a film distributor and had hired a large staff of artists. His first cartoon character, Oswald the Lucky Rabbit, soon became a favorite with movie audiences. Disney was a success — so successful that the very next year he was fired. On the following pages, you’ll find out how this blow to his career led to the creation of Walt Disney’s most famous character. You’ll look inside the Disney studio to see how animation is done. And finally, you’ll meet a young computer animator and get a chance to create your own cartoon character.

“The entire audience seemed to fall under the magic spell of the most imaginative motion picture to come out of Hollywood in years.”

— TIME MAGAZINE, 1937
‘He was a skinny little squeaker with matchstick legs, shoebutton eyes, and a long pointy nose. His teeth were sharp and fierce when he laughed, almost like a real mouse’s.’
—TIME MAGAZINE, DECEMBER 27, 1954

Mickey started out as Oswald the Lucky Rabbit (left), a popular but rather wooden character. He became more "animated" later (above and right) as Mickey Mouse.

In 1928, Walt Disney was on his own. Oswald the Lucky Rabbit had become so popular that Disney’s distributor decided to keep the character, but not Disney. So Disney and his best animator (Ub Iwerks) came up with a new character, a little mouse named Mortimer, later called Mickey after the pet mouse in Disney’s studio. The animator drew Mickey; Disney defined his personality and later supplied his voice.

Disney said about this new character: “He had to be simple. We had to push out 350 feet of film a week, so we couldn’t have something tough to draw. His head and ears were circles so they could be drawn the same way, no matter how he turned his head. His legs were pipestems put into huge shoes to make him look like a kid wearing his father’s shoes. He was
supposed to be part human, so we gave him gloves. But five fingers looked like too much — so we took one away — that was one less finger to animate. There were no frills to slow down animation. Mickey didn’t become a hit until his third cartoon, Steamboat Willie (1928). Disney, quick to pick up on the latest innovation, had added sound. Audiences were spellbound. This was the first time they had seen even seen imaginary characters talk, sing, and dance to a musical beat. Within two years, Mickey was an international celebrity. Arrogant, mischievous, and sometimes cruel, he began to get into trouble. Parents complained to censor boards about his behavior, and Mickey had to tone it down. This created a problem for the Disney staff — how would they keep their creation interesting? Disney decided that Mickey needed a more developed personality.

In his early films (see sequence, top left), Mickey was made up of circles and skinny, “rubber-hose” legs. The big round ears — usually traced from coins — balanced the oblong shape of the nose. But all those circles kept Mickey flat and wooden-looking. He had no weight or natural movement, and this made it hard to give him a real personality. The solution to this problem led to a breakthrough in animation. Some of the artists began making Mickey’s body more pear-shaped and just as rubbery and flexible as his legs. They stretched Mickey’s body out (making his arms, legs, and torso longer) when he jumped or felt happy and excited. They squashed Mickey’s body together when he fell to the ground or when he was feeling sad. This new idea, developed through studio teamwork, was called squash and stretch, and it revolutionized animation methods.

Compare the first Mickey (top, left) with the way he looked later (top, right). In which sequence does Mickey move and gesture like a real human being? With the new process, Mickey became more like a real actor, with a whole range of feelings — joy, confidence, doubt, fear, regret. Notice how his whole body now stretches and contracts to form a visual picture of each emotion.

At meetings, Disney continued to act out Mickey’s lines in his hopeful, high-pitched voice (Mickey was clearly an expression of his own personality). Like Disney, his best roles were that of explorer, leader, and director, and he was funniest when everything went wrong. Energetic, naive, enthusiastic, Mickey was ready for big, human-sized adventures. In his most famous role (left), he plays a “sorcerer’s apprentice,” or magician’s helper, in Disney’s film Fantasia. The sorcerer Yensid (Disney spelled backwards) gives Mickey a chisel. Mickey, eager to learn magic, borrows the magician’s hat and tries to cast a spell, which of course backfires. The wizard quickly restores order and here, a sheepish Mickey goes back to work. In this fantasy, built on overblown dreams of power, Mickey plays his most human role.

Today, Mickey is a classic. He’s been popular for over half a century. In 1932, Disney won an Academy Award for him. His name became a secret code word during World War II. People watched the Mickey Mouse Club on television in the Fifties, and in the Sixties he found his way into paintings by famous Pop artists. Now retired from movies, his features reduced to three circles, Mickey is simply the Disney symbol. But this strange boy-sized mouse is probably still the most recognized cartoon figure in the world.
A COMIC MASTERPIECE

In the 1940s and '50s, one of the most famous American faces was not that of a person but a cartoon. Mickey Mouse was featured in movies, newspapers, and comic books, and artists like Roy Lichtenstein grew up with Disney's creation. Mickey is fun, but he can hardly be thought of as great art. At that time, he was not even considered a fitting subject for a fine artist. Abstract Expressionism was the dominant style and to most people, art was something expressive, painterly and serious. So in 1961, when Roy Lichtenstein painted Look Mickey (above, right) many people were outraged. To them, it looked just like a large, blown-up comic strip. And perhaps it was. Lichtenstein said that sometimes he liked the original comic so much, he just transferred it to the canvas. Lichtenstein has probably simplified the shapes and reduced the colors in Look Mickey — but it is his selection of images that is the most important thing about this work. He's carefully chosen a comic-strip frame that seems to sum up humor, the media, and popular taste in one image. Artists like Lichtenstein, Warhol, and Oldenburg took their subjects from the commercial world they saw all around them — in the supermarket, beside highways, in advertisements. The Pop artists were the first to recognize the possibilities in these commercial images — not as something to be ignored, but to be used to create a new American art form.
Contemporary American artist Andy Warhol has always been fascinated by fame and stardom. He has said, "Everybody should be famous for 15 minutes." Some of Warhol's best-known works are of stars like Elizabeth Taylor, Marilyn Monroe, Elvis Presley, and Superman — anyone whom films, magazines, and TV have made instantly recognizable. And Disney's Mickey Mouse has certainly become an American superstar. In the painting above, Mickey is reduced to his essential outline and repeated a number of times, almost as if his face had been printed by a machine. Because there are so many identical Mickeys here, the image begins to lose its impact. In fact, it almost starts to resemble a wallpaper pattern. What might Warhol be implying about a culture which seems to value media heroes over real people and whose media heroes include a cartoon mouse?

Swedish-born sculptor Claes Oldenburg (rhymes with mouse) has always loved Mickey Mouse. As he puts it, "Mickey is one of the most important American symbols." Oldenburg is so attached to Mickey that he has made thousands of sculptures of him, in all sizes. In these works, the artist relates the shape of Mickey's face to that of the object that made him famous — the early movie camera. His ears are film rolls, his eyes shutters, and his tongue a handle. Can you find these features in the diagram on the left? This stylized version of Mickey's face is an architectural plan for a building which Oldenburg designed to house his Mickey Mouse collection. The visitor to this Mouse Museum enters through the tongue and the collection — comics, toys, watches, games — anything with Mickey on it — is displayed in cases along the walls. The Mouse Museum, which is about the size of a classroom, has actually been built and exhibited inside a larger museum building.
ABOUT THE MASTERPIECE

INSIDE THE

DISNEY STUDIO

FIND OUT HOW AN ANIMATED MOVIE IS MADE.

Imagine trying to make a movie without actors, sets, or locations. Everything will have to be invented. More than 100,000 frames of film will have to be drawn by hand — characters, action, special effects, and backgrounds. It will probably take hundreds of artists several years to get all these drawings done. And how do you get a group of artists to work together on the same vision of the movie? This was the task ahead of Walt Disney in 1937 when he began work on his second full-length film, *Pinocchio*. (Disney got the idea from an old Italian puppet tale, in which a wooden puppet has to go through a series of adventures — including being kidnapped, turned into a donkey, and swallowed by a whale — before becoming a real boy.) How did Disney start with only this story and end up making a film which many people consider the most creative animated feature ever produced?

1 SKETCHES

First, before starting, Disney would hire well-known illustrators to do inspirational sketches of important places in the story — like Pleasure Island (see pages 8-9), a tempting kind of amusement park where unsuspecting boys were turned into hard-working donkeys. Like a beautiful dream, the park’s glittering lights and swirling spirals pull us into the scene, and set the somewhat sinister mood for the whole film.

2 STORYBOARDS

At story meetings, the plot, characters, mood, and drama would be sketched out on storyboards. This Disney studio invention is used widely in movies and TV today. It consists of a rough script and sketches visualizing the major points of action, all pinned up together in sequence on a large board. Both the words and visuals in the film can then be seen together. Disney, a master storyboard artist, would quickly scan the boards and suggest cuts, additions, or changes.
CHARACTERS

Each character — even minor ones like this coachman, who drove the boys to Pleasure Island — would be given a unique personality. A huge, false smile fills his face and pointed tufts of hair turn him into a kind of devil. This character is convincing because he is more than a fantasy. His expression is just an exaggeration of a real emotion — greed. At this point, the characters’ voices would be recorded, and given to the layout artists.

ANIMATION

Disney would carefully “cast” animators, based on their abilities, to do the different characters. In the sequence of drawings at the left, the animator brings Pinocchio’s friend Jiminy Cricket to life. Every movement is meant to underline the cricket’s personality — although trapped at the bottom of the ocean in a bubble of air, what does he seem most concerned about? This 10-second sequence might have taken over 200 different drawings — each changing the movement just slightly. When combined, they seem to flow together making one smooth motion. “Pencil tests,” or films of the rough drawings, would allow the animator to check the timing and lifelike quality of the movements.

FINISHING AND SHOOTING

The animators’ line drawings of the characters were duplicated on cels and painted in flat colors. The cels were then shot one at a time over three-dimensionally rendered backgrounds (like this extreme close-up, below, of Jiminy Cricket floating past the eye of a monstrous whale). Finally, together with music and sound, this film of painted drawings would be projected on a motion picture screen, and the magic would begin.

The layout artists had to be able to visualize the whole movie in their heads. They created its style, designed the backgrounds, staged the action, and determined camera positions (close-ups, wide-angle shots, zooms, and pans). In the dramatic shot above, the camera appears to be set inside the mouth of a huge whale.
SEVENTEEN-YEAR-OLD ANDY BEVERLY BEGAN WORKING WITH COMPUTERS WHEN HIS MOTHER TOOK HIM TO HER COMPUTER CLASS SIX YEARS AGO. AND HE'S BEEN DRAWING AND CARTOONING EVER SINCE HE COULD PICK UP A PENCIL. SO IT'S NOT SURPRISING THAT HE WOULD EVENTUALLY PUT HIS TWO INTERESTS TOGETHER. HIS FIRST SERIES OF COMPUTER CARTOONS, CALLED THE RACE (YOU CAN SEE FOUR FRAMES BELOW), WON A SCHOLASTIC ART AWARD LAST YEAR. TO CREATE THIS WORK, THE ARTIST USED A PROGRAM THAT RAN HIS WORK AS A TIMED SERIES OF PICTURES WITH SPECIAL VIDEO EFFECTS.* ANDY WAS A SOPHOMORE AT WINTER PARK HIGH SCHOOL (FLORIDA) WHEN HE DID THESE CARTOONS. NOW A JUNIOR, HE PLANS TO MAJOR IN ART WHEN HE GOES TO COLLEGE.

What were your first cartoons like? I remember I came up with this character called Joe. I filled up sketchbooks with Joe and his adventures. I liked to draw him from different perspectives — from up in the air, under a car, inside a TV — places I could never be, but I could imagine.

How did you begin drawing on the computer? I got started after I got a computer three years ago. But the idea really developed when we moved to Florida. We were looking for a place to live, and when I saw this computer store I said, “Hey! We have to live here!” Later I went to the store and got to know everyone. They let me use the latest models. I’d draw them pictures — for ads and things — in exchange for disks. It was really nice — I’d go there every day after school. It was fun exploring all the things you can do on the computer.

How did this cartoon series come about? I was in a cartooning class, and we had to illustrate a scene from a fable. My teacher had copies of different fables and I picked one about a lizard — a chameleon — and an elephant. I cut it down to just the sentences I wanted to illustrate and use as the narration.

Since I was down at the store every day I thought, why not do this assignment on the computer?

How did you go about it? What I wanted to draw was already pretty clear in my mind. It was just a matter of putting it on the computer. I can think up things faster than I can draw them so I didn’t do any rough sketches.

Did you have any trouble getting the characters the way you wanted? No, there’s so many chameleons around where I live that I had a pretty good idea how to draw them. For the elephant, I did go to the library to look at how Disney

One day a chameleon invited an elephant to run a race with him the next day.

Wanna Race?

During the night the chameleon hid several of his brothers at short distances along the route to be covered.
did elephants. I didn't want the elephant to be too detailed. He got even simpler as I went along.

**How do you express the feelings of your cartoon animals?**

Usually by exaggerating the eyes and mouth. In this series, the elephant has wide eyes, small pupils, and an open mouth with the tongue falling back. This is how I showed surprise and shock.

**What ideas did you have about “staging” the individual scenes?**

For the backgrounds, I had in mind a dusty, rocky desert landscape. And I tried to use a variety of points of view in each of the different scenes, to keep the story interesting. The first visual is a close-up of the elephant—he takes up most of the frame. He looms over the little chameleon, giving him a look that says, “What you? Beat me? Ha!”

**How is it different—doing cartoons on a computer?**

It's faster. Adding texture and shading automatically saves time. Otherwise you'd have to do each stroke by hand. Also, it's easy to do words, and you can print out as many copies as you want.

**Were you happy with “The Race” when you finished it?**

I was glad it was done. So was everybody else. It got me off those computers! Looking back, I can see changes I might have made. Some of the frames get kind of complicated, with all those different textures. I should have used more solid areas to keep it simple. I've found it's always better to have the main objects lighter or darker than the background.

**How would you describe your humor?**

It's probably everybody else's mixed together. I've done a lot of studying of other people's work, trying to find my own style. I would draw something myself, and if I couldn't do a hand, or whatever, I'd copy it from one of my favorite cartoonists. Sometimes I think I've kind of lost my sense of humor. My drawing is better now, but I have a harder time coming up with funny ideas.

**Why do you keep doing art?**

It's a good way to record my feelings and ideas. I'm always thinking of things, and I want to get them down before I forget. In art class, my teacher let me go in the back room and draw—I'd sit there doodling all these things in my head. I remember I used to draw out my dreams as little cartoon sequences. They didn't make any sense, but that's the way dreams are.

**Do you have any advice to readers about computer cartooning?**

Cartooning's the same as regular drawing, but you simplify more and work on movement and expression. For instance, on faces, look at how eyes affect the expression. If you already know how to draw, there's no problem doing it on a computer. Just sit down and experiment. You'll discover lots of things that aren't even in the manuals. And if you don't have a computer, go ask to use one down at the store, like I did.

Meanwhile, the chameleon had nimbly taken place on the elephant's tail, without being noticed.

The chameleon dropped down from the elephant's tail and set off to cover the last bit of road by himself.

* Andy used the Slide Show Magicium program with a Macintosh computer.
CREATING A CARTOON CHARACTER

"WE CANNOT DO FANTASTIC THINGS UNLESS WE FIRST KNOW THE REAL." — WALT DISNEY

IN THIS ISSUE, YOU’VE BEEN READING ABOUT THE CREATION OF ONE OF THE MOST FAMOUS CARTOON CHARACTERS EVER INVENTED. AND EVEN THOUGH MICKEY NEVER LOOKED VERY MUCH LIKE A MOUSE YOU MIGHT SEE IN NATURE, HE WAS ORIGINALLY BASED ON AN ACTUAL ANIMAL — THE PET MOUSE DISNEY KEPT IN HIS STUDIO. IN THIS WORKSHOP, YOU’LL START WITH A REAL ANIMAL AND, USING METHODS DEVELOPED BY CARTOONISTS, YOU’LL STYLIZE THIS IMAGE INTO YOUR OWN UNIQUE CARTOON CHARACTER.

MATERIALS

- 18" x 24" sulfite paper
- 18" x 24" tracing paper
- Nature magazines: for example National Geographic, Ranger Rick, Geo, World.
- Ebony pencils
- Scissors
- X-Acto knife
- Masking tape

STARTING OUT

1 Using nature magazines as source, select four large, clear photographs of animals. Photo should show whole animal in a natural, or characteristic position (bear standing, beaver chewing, lion roaring, etc.). Face should be visible for character development. Pick a personality type — humorous, fearful, sad, peaceful, anxious, innocent, wise — that best matches one of your photos.
2 Do a careful, accurate blind contour drawing of the photo you chose. (Move your eyes along the edge, or contour, of the animal. Without looking at your drawing, move your pencil at the same speed). Tape down your contour drawing, then tape tracing paper over it. Start to simplify your original drawing — eliminate details that detract from your character. (Is your fish to be sleek and glamorous? Leave out the scales and gills.) Begin to exaggerate, emphasize, and distort features that will add to your character’s personality (long, flowing, sparkling fins might emphasize the fish’s glamour). Keep the drawing simple and easy to understand.

3 After getting your whole concept down, work on one feature at a time (hand, claw, mouth). Develop individual features on a separate piece of tracing paper placed on top of drawing. You might want to incorporate some human poses when developing your character. Remember to keep proportions believable, avoid costumes, and try to stay away from making character too sweet and cute.

SOME SOLUTIONS

What kinds of personalities have these two artists given their creations? What features have they left out, added, or changed? For instance, does a feature such as large eyes make the animal chosen unique? What personality trait might large, staring eyes remind you of — curiosity, intelligence, shyness, fear? Would you show each of these characteristics in the same way? In developing a character, Disney’s animators found that it helped to study the movements of the real animal on which it was based. Nature films were ideal, as the artists could stop the action and examine the movements, frame by frame. Think of the way your animal moves. Does this aid you in developing its personality? Named two of his animal characters Donald and Dale. Can you think of an appropriate name for your own?
Miccy may be the most famous cartoon mouse, but do you recognize the dog below? Snoopy and other characters from the comic strip Peanuts will be featured in The Graphic Art of Charles Schulz, at Chicago’s Art Institute until May 15. The show will travel to The Norton Gallery, West Palm Beach, FL, June 15-Aug. 17; Evansville (IN) Museum, Sept. 7-Oct. 19; Palm Springs (CA) Museum, Nov. 20-Dec. 30. In 1987, it will go to museums in Brooklyn, Alabama, San Antonio, and Minneapolis.

TOKYO IN THE US
How would it be to live in Tokyo — either centuries ago or today? Tokyo: Form and Spirit, a Japanese art show which answers this question, will be at the Walker Center, Minneapolis, Apr. 20-July 20; Los Angeles Art Museum, Aug. 30-Oct. 26; Japan House, NY, Nov. 23-Feb. 8, 1987.

COMING SOON
One of the greatest masters of modern art was Henri Matisse. You can read more about this important French artist next fall in the Sept/Oct. issue of Art & Man. But this summer, you may get a chance to see works like Matisse’s Red Room (left) and paintings by Picasso, Van Gogh, and Cezanne — most of which have never been seen in this country. These works, which have been in Russia for many years, will be coming to the U.S. in Masterpieces from the Soviet Union, opening at the National Gallery of Art in Washington, DC, May 1-June 25. The show will go to the Los Angeles County Museum, July 2-Aug. 26; and the Metropolitan Museum, NY, Sept. 3-Oct. 26.