Originally Processed With FOIA(s):
S

FOIA Number:
S

FOIA

MARKER

This is not a textual record. This is used as an administrative marker by the George Bush Presidential Library Staff.

Record Group/Collection: George H.W. Bush Presidential Records
Collection/Office of Origin: Speechwriting, White House Office of
Series: Speech File Backup Files
Subseries: Chron File, 1989-1993

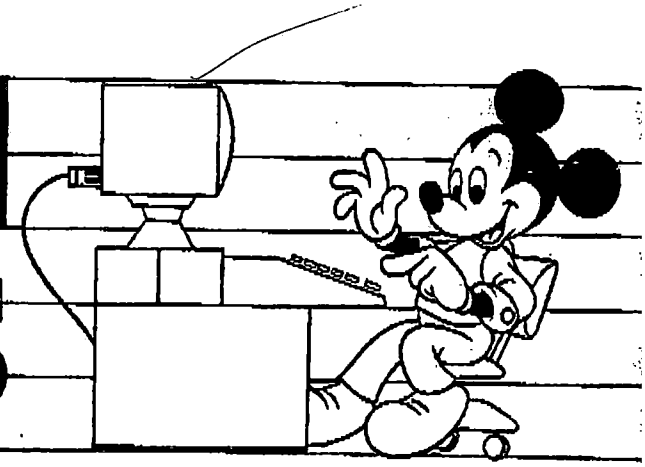
OA/ID Number: 13773
Folder ID Number: 13773-009

Folder Title:
Disney - Points of Light 9/30/91 [OA 8329] [2]

Stack:	Row:	Section:	Shelf:	Position:
G	26	21	6	5

Walt Disney World®

NEWS



Press & Publicity Department • P.O. Box 10,000 • Lake Buena Vista, FL 32830-1000 • (407) 824-4531

WORLD SHOWCASE PRESENTS SWEEPING SPECTACLE OF NATIONS

LAKE BUENA VISTA, Fla. -- If Future World's look of tomorrow is the heart of Epcot Center, then World Showcase -- with its kaleidoscope of international experiences -- is surely its soul.

A community of nations in miniature -- focusing on cultures, traditions and accomplishments of people from around the globe -- World Showcase is the only permanent exposition of its kind anywhere.

Awaiting visitors are exotic cuisine, entertainment, artisans and scenic wonders of 11 countries -- Canada, The United Kingdom, France, Japan, Italy, Germany, China, Mexico, Morocco, American Adventure -- and the newest addition to this international community, Norway, Gateway to Scandinavia.

Bordering a 41-acre lagoon beyond Future World, the countries of World Showcase are re-creations of landmark architectures and historic scenes familiar to world travelers. The mini-towns have buildings, streets, gardens and monuments designed to give Epcot Center guests an authentic visual experience of each land.

Even a casual afternoon's walk will allow guests time for viewing the natural and man-made wonders represented by the dramatic pavilions, from the rugged grandeur of Canada to a boat ride through three eras of Mexico, with visits along the way to Renaissance Italy, a delicate Japanese garden and teahouse or a German platz where Oktoberfest is in session.

-more-

©1988 The Walt Disney Company

And every visitor will want to sample the heather-and-ale mood of an English town, with its shops and pubs spanning centuries of architecture, from quaint thatched-roof cottages to Victorian elegance.

A must stop is The American Adventure, a 108,000-square-foot, Georgian-style structure featuring perhaps the most-impressive theatrical performance in all of Epcot Center. Sponsored by Coca-Cola and American Express, The American Adventure presents a 29-minute drama of the nation's 350 years of history, utilizing elaborate three-dimensional settings and a new generation of Disney "Audio-Animatronics" characters. Host figures Mark Twain (who carries a smoking cigar) and Benjamin Franklin (the first "Audio-Animatronics" character to walk) narrate America's progress from the era of the Pilgrims to the present.

But to fully enjoy the sweeping spectacle that is World Showcase, most guests may find a single visit inadequate. Shoppers, for example, will discover that commercial firms from participating nations have stocked a wide variety of merchandise from their respective countries.

Cuisine? L'Originale Alfredo Roma Ristorante -- designed in rich Florentine style -- and Les Chefs de France offer world-famous dining experiences. Norway offers the "koldtbord," a help-yourself dining experience that features a real Norse country cold and hot food selection. There's also a version of Mexico City's San Angel Inn and Tokyo's Mitsukoshi Restaurant, plus authentic dining and cooking styles of Canada, Morocco, Germany and The United Kingdom.

Architecture? There's the distinctive flavor of the Orient in a half-size replica of China's beautiful Temple of Heaven (Beijing), and in a delicate five-story pagoda and a massive Samurai castle from Japan. In Italy, re-creations of the Doges' Palace and campanile (bell tower) lead visitors to a version of St. Mark's Square.

The Morocco Showcase faithfully copies the architecture and atmosphere of this famed African kingdom. In Canada, the look of a famous hotel, Chateau Laurier, crowns a sculptured landscape with a Rocky Mountain vista. A picturesque scene awaits the Norway Showcase guest. From the ancient Stave church with its imposing spires to a replica of Oslo's 14th century Akershus Castle, Epcot's newest attraction is a new World Showcase treasure.

Motion pictures? Both China and Canada present spectacular versions of Circle-Vision 360 films. Disney filmmakers gave new mobility to cameras that captured such grandeurs as China's Forbidden City, seldom-seen Tibet and Mongolia and views of the ancient silk route once followed by Marco Polo. The full-circle "O Canada" production even takes viewers on a rip-roaring buckboard ride in the famous Calgary Stampede.

France visitors will see a 200-degree screening of "impressions de France," a spectacular airborne travelogue set to classical music and shown in a replica of a famous Paris theater.

The film "Norway" comes at the conclusion of "Maelstrom," an exciting high seas adventure that includes encounters with vikings, trolls and a North Sea storm. Guests step off the 16 passenger Viking boats into a quiet fishing village where they await the movie that offers a five-minute montage of modern Norway.

Live entertainment? Each country presents artisans, artists and performers dressed in traditional costumes. In France, white-faced mimes amuse street crowds, and in England Cockney players entertain with street-wise comedy. Visitors can listen to the gentle strains of folk ballads in Norway or experience the dynamic marachi music of Mexico.

In Japan, folk dancers perform in front of the replica of an eighth-century pagoda and in China, the mysterious East is represented by dancing dragons. In Germany, an oompah band and the sounds of glockenspiels and alpenhorns enliven a festival spirit. Moroccan artisans work in their specialties while musicians perform native music on the streets outside their shops.

World Showcase is designed to entertain and inform visitors as well as provide a two-way cultural exchange for nationals working in international pavilions. Each pavilion is staffed by men and women from that country. Several are participating in a program called World Fellowship, During each year's stay in Walt Disney World, each participant takes part in a work-study curriculum designed to broaden international outlooks and experiences.

Nighttime offers a thrilling display of light, music, lasers, fountains and fireworks as IllumiNations lights up World Showcase. Hundreds of thousands of lights create a wonderland by night for the thousands of guests who line World Showcase Lagoon for this spectacular nightly ritual.

Each Showcase is based on concepts chosen for their contributions to a country's social, cultural and architectural heritages. Following is a summary description of the patterns involved in each country's design.

THE AMERICAN ADVENTURE

From the late 1700s to around 1830, America's public architecture was designed from a mixture of styles, including English Georgian -- developed during the reign of King George III -- which captured the spirit of the American Revolution. The American Adventure combines Georgian-style classic buildings in what is intended as a people's mansion and includes examples from Williamsburg, Independence Hall in Philadelphia, the Old State House in Boston and Thomas Jefferson's home, Monticello.

CANADA

The Canada Showcase includes examples of buildings and scenes found throughout the nation. The romantic 19th-century French Chateau-style hotel is a prominent feature in many cities, usually convenient to a railroad station. A waterfront area is designed to reflect the look of the Eastern Seaboard, while Victoria's Butchart Gardens were the pattern of a West Coast look.

Near the hotel a rugged stone building, modeled after a famous landmark near Niagara Falls, is reflective of Canada's British influence. An Indian village with totems signifies the culture of the Northwest, while Canada's wilderness is presented in a setting complete with steep mountains, waterfalls and a northern forest.

THE UNITED KINGDOM

Time, materials and style were compressed into a single combination of a city, town and rural atmosphere for The United Kingdom. Included is a pub in a building reflecting a cluster of periods and different facades. Visitors traveling an informal street will find a 1500s-style thatched-roof cottage, a four-story timber-and-plaster building, a formal square with a Hyde Park bandstand, a pre-Georgian plaster building and a formal Palladian exterior of dressed stone. A city square with classic formal facade copies a look found in London and Edinburgh. On other streets are found a Regency multi-porched row building, a town gate and clock tower representative of York, a 1400s brick-style house and a plaster-and-stone great hall. A promenade shows an exterior facade similar to Hampton Court.

FRANCE

The showcase reflects the ambiance of France between 1879 and 1910, a period known as La Belle Epoque, or the beautiful time. This was an energetic period of art and literature, grand exhibitions, inventions, science: A time when a spectrum of styles formed the character of Paris boulevards and architecture.

Within the showcase are: a bookshop, reflective of art nouveau; a perfume and designer accessory shop styled after the chateau look of an older Paris; a pre-show facade copied from a classic portico, and a post-show interior modeled after Les Halles, the busy garden market of Paris. Elsewhere are a sidewalk cafe and restaurant that is a scaled-down version of a 19th-century building with rolling mansard roofs and elegant ironwork. Also, a provincial street reflects the village atmosphere of France, complementing the formal, tree-lined streets of Paris. The one-tenth replica of the Eiffel Tower was constructed using Gustaf Eiffel's original blueprints.

JAPAN

Architecture and landscaping meld flawlessly in this showcase. Rocks, which in Japan symbolize the long life on earth, combine with water, symbolizing the sea, which the Japanese consider a source of life. These, with a variety of trees and other plantings, blend with the Japanese architecture to produce an authentic Oriental experience. A pagoda which stands prominently in the showcase was modeled after an eighth-century structure in Japan; the torii gate near World Showcase Lagoon is similar to one in Hiroshima Bay. The structure which houses the Mitsukoshi Department Store on the first floor and a formal Japanese restaurant on the second was inspired by a portion of the Gosho Imperial Palace in Kyoto.

MOROCCO

Across a wide promenade, the Koutoubia Minaret (a detailed replica of a famous prayer tower in Marrakesh) stands guard over the entrance to this showcase. In the center of the rectangular courtyard is an ornate fountain lined with thousands of multi-colored tiles.

Like most Moroccan cities, the showcase is divided into two sections: The ville nouvelle (new city) and the Medina (old city). The entrance to the Medina, the thriving marketplace of Moroccan cities, is usually through an arched gate. Guests pass beneath pointed arches and the swirling blue patterns of the Bab Boujouloud Gate, a replica of a gateway in the city of Fez. Just inside the gateway is the Fez House, a replica of a traditional Moroccan home.

In the Medina a reproduction of the Chella Minaret in Morocco's capital of Rabat rises above the shops and shoppers. There also a reproduction of the Najjarine Fountain in Fez stands as the traditional village fountain.

ITALY

Architectural elements of Venice stand at the showcase entrance, including the Doges' Palace and a scaled-down version of the campanile (bell tower) of St. Mark's Square. Complementing these buildings are Venetian bridges, gondolas, colorful barber poles and the sculpture of the Lion of St. Mark atop a column. Other buildings are composites of architecture found throughout Italy. Alfredo's Restaurant is reminiscent of the Florentine style; the stairway and portico adjoining the Doges' Palace is typical of Varona; the town hall overlooking the promenade is reflective of Northern Italy. The garden wall enclosing the piazza is typical of Rome and Florence. Sculptures include an heroic version of Bernini's Neptune fountain, based on the original in Florence and the Fountain of Trevi.

GERMANY

Building styles represent different periods and locales, but rely heavily on Germany's romantic, fairy-tale architecture. The atmosphere of a biergarten is derived from the 16th-century town of Rothenburg. The platz (plaza) includes a special place for a dynamic sculpture of St. George and the Dragon. The facade of an art-and-book shop was inspired by the Kaufhaus, a 16th-century merchants' hall in Freiburg in the Black Forest; statues on the building recall the rule of the Hapsburg Emperors. The tourism facade was copied from a 400-year-old town hall in Romsburg Square in Frankfurt. The high wall serving as a backdrop for the showcase was inspired by the Eltz Castle on the Mosel River and Stahleck Castle on the Rhine.

CHINA

The gateway of the showcase is based on the beautifully styled main gate at the summer palace in Beijing, which also provided the inspiration for the half-size Temple of Heaven, the most visually prominent feature. The Temple of Heaven, through which guests must pass into the Circle-Vision 360 attraction, symbolizes the Chinese universe. A public marketplace, designed to encourage socializing, includes facades borrowed from an elegant home, a school house, a city gate and shop fronts with European overtones.

The art gallery features a "Lotus Blossom" gate and a formal saddle-ridge roof line. Gardens and reflecting ponds simulate those found in Suzhou and symbolize the order and discipline of nature.

NORWAY

Norway Showcase with its imposing stone, wood and tile architecture is the newest addition to World Showcase. From the ancient wood spires of the Stave Church to the quaint village shops to the film on contemporary Norway, the showcase provides a look at Norway from the Vikings to the sophisticated, industrial nation of today. One-thousand year old Viking artifacts, some found in North America, illustrate the daring of these hearty seamen. Across the cobblestone plaza from the Stave Church stands the majestic Akershus Castle. This reproduction of the 14th century structure that guards Oslo Harbor houses the elegant, 220-seat buffet style Akershus Restaurant. A unique feature of the pavilion is "Maelstrom," an exciting ride through adventure. Boarding 16-passenger dragon-headed boats, guests float through a Viking village, pass legendary trolls who attempt to impede the progress of the travelers, encounter a waterfall and a North Sea storm and finally emerge in a quiet Norwegian fishing village.

MEXICO

Fronting the World Showcase Lagoon is a quaint, colonial-style building, reflective of architecture in central and Southern Mexico. A Mayan pyramid dominating the entranceway expresses the country's proud pre-Columbian heritage. Inside the showcase is a museum gallery. Beyond the museum, visitors enter a formal portico, modeled after a mayor's mansion, and then a typical colonial plaza, where a market-day and a festival atmosphere prevail. Beyond the plaza, visitors begin a boat-ride journey past a smoking volcano for a close-up look at Mexico's colorful heritage and attractions.

WORLD SHOWCASE PARTICIPANTS

CANADA

Labatt Brewing Company Ltd. (beer)

CHINA

China Pavilion Exhibition Corp. (food and merchandise)

FRANCE

Barton & Guestier (wines)

Chefs de France of Orlando, Inc. (restaurants)

GERMANY

Bahlsen of America, Inc. (bakery products)

Braurie Beck GmbH & Co. (beer)

Goebel Art (GmbH) (porcelain)

H. Schmitt Sonne GmbH (wine)

ITALY

International Gourmet Restaurants of America, Inc. (restaurant)

JAPAN

Kirin, USA, Inc. (beer)

Mitsukoshi (USA), Inc. (department store/restaurant)

MEXICO

Arribas Brothers (glass sculptures)

San Angel Inn (restaurant)

Cerveceria Moctuzuma (Don Equis & Superior beers - cantina & restaurant)

MOROCCO

Marrakesh Moroccan Restaurant, Inc. (restaurant)

Kingdom of Morocco (tourism)

NORWAY

Vard A/A (shipping)

Selmer-Sande A/S (construction)

Den Norsek Creditbank (banking)

Vesta-Gruppen A/S (insurance)

Aker Norcem A/S (offshore oil)

Kosmos A/S (shipping)

Det Norske Veritas (marine insurance)

Frionor Norsk Frossenfisk A/L and Norway Foods A/S (seafood)

Norsk Data A/S (computers)

Dale of Norway (ready-to-wear clothing)

Jotul (woodburning stoves)

Norseland Foods (Jarlsberg cheese, Kavli bread)

UNITED KINGDOM

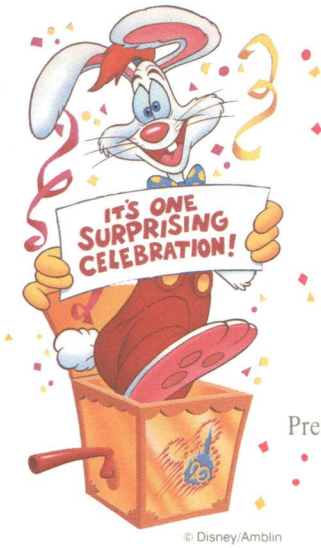
Bass Export Ltd. (Rose & Crown Pub - beer & ales)

Mid Wales (merchandise, pottery, jewelry, giftware)

Pringle of Scotland (fine woolens)

Royal Doulton (china, dolls & figurines)

R. Twinings & Co. Ltd. (teas)



© Disney/Amblin

Walt Disney World®
20th ANNIVERSARY
NEWS
Press & Publicity Department • P.O. Box 10,000 • Lake Buena Vista, FL 32830-1000 • (407) 824-4531

WALT DISNEY WORLD 20TH ANNIVERSARY TO FEATURE SURPRISES, SPECTACULARS

LAKE BUENA VISTA, Fla. -- Call it a Bi-Tencennial, a Twin-Tennial, or simply a 20th anniversary. By any name, it means Walt Disney World Resort is turning 20, and to mark the occasion, a 15-month surprise party will feature all-new shows and entertainment spectaculars throughout the Vacation Kingdom.

The special fun begins Oct. 1 -- the anniversary of the Vacation Kingdom's grand opening in 1971 -- and continues through 1992.

A colorful aerial spectacle will brighten Epcot Center days. A marvel of electro-technical wizardry will fill Magic Kingdom nights with magical, moving colors. Pretty women will sing and dance their way to stardom at the Disney-MGM Studios Theme Park. And everywhere, fun-loving Roger Rabbit will pop up to announce, "Sur-p-p-prise!"

Remember the Magic Word: Surprise

Disney entertainment wizards are going to new heights to present what show producer Chase Senge calls "the biggest, best parade in 'World' history." Towering 35 to 40 feet above the Magic Kingdom's Main Street, U.S.A., a cast of brilliantly colored, larger-than-life inflated Disney characters herald festivals from regions of the world in "Surprise Celebration."

Roger Rabbit decked out as the carnival jester soars above a carriage on which a surprise grand marshal, selected from among park visitors, leads the procession. The festive 20th-anniversary theme song builds, and on cue. . . everyone along the parade route is encouraged to sing in unison, "Surprise!" as each new unexpected feature pops into view.

-more-

Printed on recycled paper.

20 YEARS Walt Disney World®

New Orleans' Mardi Gras, Latin America's Carnivale de Rio and Europe's Carnival in Venice are celebrated in music, dance and stunning costuming during the 20-minute parade, a daily feature of the 20th anniversary year.

Imagine Goofy as a 35-foot "jack-in-the-box," Minnie Mouse as a towering Brazilian dance queen, Donald Duck as a bigger-than-life calypso drummer, Pluto donning the dog-gonnest Caribbean garb and Mickey Mouse in royal finest. Eyes turn upward to admire them all, then back to street level where more than 100 musicians and dancers join in the merriment.

And with each passing parade unit, there's a . . . surprise!

Nighttime Magic Fills the Kingdom

Future-technology wizardry creates a moving gallery of light, music and color during "SpectroMagic," the biggest nighttime attraction ever in the Magic Kingdom. "Imagine complete animated cels the size of a house," says Show Producer Don Frantz. "That's what we are producing with a synthesis of music, light and mechanical animation along the mile-long Magic Kingdom parade route."

The 20-minute production borrows from the prismatic holographic industry, military lighting developments, electro-luminescent and fiber-optics technologies, and tosses in light-spreading thermoplastics, clouds of underlit liquid-nitrogen smoke and a sprinkling of good old-fashioned twinkle lights.

Powered by batteries and synchronized by computer with a new, digital music score, the light show portrays the magical worlds of Disney -- music, wonder, fantasy and dreams.

Mickey Mouse in prisms of light leads the way, followed by tableaus depicting the merriment of a musical band and colorful garden, the beauty of the sea, the wonder of flying horses, and the chilling specter of an evil, winged monster with a 38-foot wingspan.

A fanfare unit announces the final act -- a 150-foot-long unit showcasing Cinderella's coach and carousel all decked out in dazzling colors. At the front, Practical Pig dips his paint brush into white, gives a "swish," and the entire scene turns a scintillating, brilliant white. Jiminy Cricket, perched at the back, sprinkles a confetti of light while Practical Pig plunges his brush into color and restores the stunning array of hues to coach, carousel and everything else in the scene.

The high-tech spectacle of lights is complemented by a musical main theme plus individual musical numbers relating to show segments -- "an entire environment of sound," Frantz says.

"The music and show are totally integrated," adds Disney entertainment vice president Ron Logan. "Our goal is: if a blind man and a deaf man are standing together, they'll feel and experience the same thing."

Daytime Brighter Than Ever at Epcot Center

Explosive rainbow colors fill the daytime sky at Epcot Center during daily presentations of "Surprise in the Skies." Vivid fireworks in reds, blues and greens announce a show featuring boats with multi-colored flags which pull six colorful delta-wing kites into the air, where they are joined by 10 paraplanes flying the colors of Epcot Center's World Showcase nations.

Patriotic music introduces a red, white and blue paraplane and similarly colored pyrotechnics. The squadron of paraplanes joins in the display with a release of red, white and blue smoke.

Thirty-five-foot-high inflatable Disney characters in international garb pop up along World Showcase promenade and become rallying points for the "real-live" characters to meet and greet Epcot Center guests.

Disney-MGM Showstoppers: Live and in 3D

The golden age of stage and screen is rekindled in a new live spectacular at Disney-MGM Studios Theme Park. "Hollywood's Pretty Woman" takes audiences to "Club Hollywood," where proprietor Mickey Mouse hopes to impress actor-turned-movie-producer Roger Rabbit with the club's singing-and-dancing talent.

The musical fun at Theatre of the Stars salutes the talents of such Hollywood greats as Judy Garland, Ginger Rogers, Fred Astaire and Carmen Miranda.

Meanwhile, a dynamic family of "Dinosaurs" joins the beloved cast of "Jim Henson's Muppets on Location" to present yet two more memorable shows with a distinct Hollywood flavor at Disney-MGM.

Earl Sinclair and his prime-time fossil family, the "Dinosaurs" from the ABC-TV series, take Hollywood by storm when they appear as "guests of extinction" in a glittering display of Mesozoic mania on the Studios' Hollywood Boulevard.

On the Studios' Central Park Backlot, those zany Muppets appear for an on-location film shoot featuring favorite songs and unmatched performances by Kermit the Frog, Miss Piggy and a celebrated cast of Muppet stars.

A courtyard away at the Studios Theme Park, "Jim Henson's Muppet*Vision 3D" attraction continues its premier run as a fun-filled combination of "live" Muppets interacting with a 3D film of Muppet antics.

During shows in all three parks as well as resort shows throughout Walt Disney World, Roger Rabbit pops in on the action to announce a "Sur-p-p-prise!" show-stopper filled with music and fun involving guests selected from the audience for surprise gifts and honors.

Special surprises also are included in all 1992 Walt Disney Travel Company vacation packages to Walt Disney World Resort. Local travel agents have the information.

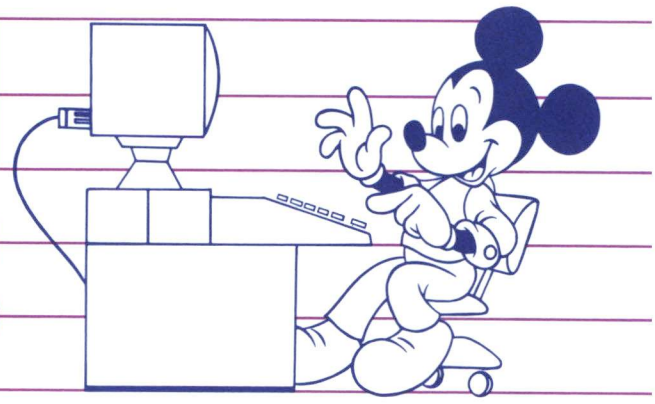
Further information about Walt Disney World, including theme park hours, ticket media, recreation and accommodations, is available by calling Walt Disney World Guest Information at (407) 824-4321, or by writing to Guest Letters, Walt Disney World Resort, P.O. Box 10040, Lake Buena Vista, FL 32830-0040.

Reservations for the 17 resort hotels, vacation-villa resort or campground resort featuring a total of more than 15,000 accommodations on Walt Disney World property are available by calling (407) 934-7639.

-30-

4076P:bia:dh:rev. hia

Walt Disney World®
NEWS



Press & Publicity Department • P.O. Box 10,000 • Lake Buena Vista, FL 32830-1000 • (407) 824-4531

WALT DISNEY WORLD GUESTS ARE TREATED TO MORE THAN DOUBLE THE FUN FOLLOWING A DECADE OF VACATION KINGDOM GROWTH

LAKE BUENA VISTA, Fla. -- Whole new theme park worlds celebrating human achievement and the magic of Tinseltown, a water park with misty surf lapping its shores, a bustling nightclub theme park and new themed-resort adventures have marked a decade of Walt Disney World Resort growth that dramatically broadens the vacation horizons of fun-seekers of the '90s.

The "World" premieres of Epcot Center (1982) and the Disney-MGM Studios Theme Park (1989) have tripled the Vacation Kingdom's theme park adventures, joining the famous Magic Kingdom park that has entertained millions of guests since the dawn of Walt Disney World Resort on Oct. 1, 1971.

Typhoon Lagoon, a second themed water-park four times the size of Disney's River Country (the granddaddy of water parks), opened in time to cool the summer of '89 with a variety of splashing streams and slippery slides cascading from a 95-foot-high watershed toward a lagoon where the surf's up: Six-foot breaking waves bring the seashore to Central Florida.

Beyond sundown, the bright lights are up on Pleasure Island, a complex of six nightclubs plus restaurants and boutiques. The island, which features a nightly New Year's Eve celebration, brought high-energy nightlife to the Vacation Kingdom in summer 1989.

-more-

©1988 The Walt Disney Company

The '80s and early '90s have seen Disney "resort magic" grow by hotel rooms and campsites -- more than three times. There currently are 15,212 overnight accommodations within 17 hotels, a campground and vacation villas on Walt Disney World property. In 1980, by contrast, there were 4,440 accommodations in seven hotels plus the campground and villas.

In the '80s, the 901-room Disney's Grand Floridian Beach Resort and 2,112-room Disney's Caribbean Beach Resort opened, treating guests to themed vacation adventures to "long ago and far away." In its fantasy escape to turn-of-the-century Florida, the Grand Floridian has established a new landmark of luxury on the Disney property. The Caribbean Beach, a relaxed 200-acre territory of swaying palms and brightly colored villages reminiscent of wave-lapped tropical islands, has introduced a Disney themed adventure in the moderate price range.

At the Disney Village Hotel Plaza, the addition of the Buena Vista Palace, The Hilton and the Guest Quarters Suite Resort during the '80s increased the number of rooms from 1,500 to more than 3,700 at the seven "Official Hotels of Walt Disney World."

The 635-room Disney's Yacht Club Resort and 580-room Disney's Beach Club Resort opened in fall 1990. They followed the June debut of the 1,514-room Walt Disney World Dolphin and the January debut of the 758-room Walt Disney World Swan to launch another wave of Disney hotel growth into the '90s and introducing a whole new resort area -- the Epcot Resorts. The complex includes more than 254,000 net square feet of meeting and convention space.

The four hotels have easy access to Epcot Center by means of a new International Gateway which allows guests to travel by tram or walkway to a new theme-park entrance near France in World Showcase. There's also water-taxi transportation from the hotels to the Disney-MGM Studios Theme Park.

Two more Disney themed resorts in the moderate price range -- the 1,008-room Port Orleans (which opened June 1991) and 2,048-room Dixie Landings (opening 1992) -- provide still other fantasy vacation venues.

The Magic Kingdom and its surrounding resorts opened Oct. 1, 1971, on a 28,000-acre site near Orlando, Fla.

From the beginning of construction in 1968, Walt Disney World has followed Walt Disney's concept for an Experimental Prototype Community of Tomorrow (EPCOT), using innovative technologies in construction, operation and transportation to create a unique, future-reaching community encompassing the entire 43-square-mile site.

Its prototype systems contribute to the enjoyment, safety and convenience of a visitor population of up to 50,000 guests who "live" on the property each night. Plans now being developed by the Disney Development Co. may also include residential areas, business and research centers, and new entertainment and resort facilities.

The Magic Kingdom, Epcot Center and Disney-MGM Studios Theme Park, along with all the other Walt Disney World facilities, are open every day. Park operating hours vary, with extended hours during holidays and peak vacation seasons. Following is a summary of major features in the giant complex:

MAGIC KINGDOM

The Magic Kingdom, based on the Disneyland design, covers 100 acres and offers 45 major shows and adventures in seven lands: Main Street, U.S.A.; Adventureland; Frontierland; Liberty Square; Fantasyland; Tomorrowland, and Mickey's Starland -- which premiered in 1988 as Mickey's Birthdayland during Mickey's 60th birthday year as the first new "land" since 1971. The many popular attractions include Mickey Mouse's house in Starland plus Pirates of the Caribbean, Big Thunder Mountain Railroad, Haunted Mansion and Space Mountain. Mickey Mouse and other Disney characters make frequent appearances joining bands, singers, daily parades and street-corner performers that are favorites of Disney guests. It has parking for more than 12,000 vehicles.

EPCOT CENTER

Epcot Center, which opened Oct. 1, 1982, is a 260-acre international exposition with two main areas: Future World, showcasing imagination and technological achievement; and World Showcase, presenting the culture, entertainment, crafts and architecture of many nations. Wonders of Life, presented by Metropolitan Life, is the newest of Future World's eight major attractions.

Eleven countries surrounding World Showcase Lagoon include Canada, United Kingdom, France, Morocco, Japan, Italy, Germany, China, Mexico and Norway plus the host, American Adventure. Epcot Center is located three miles south of the Magic Kingdom (two miles west of Walt Disney World Village and a mile northeast of the Disney-MGM Studios Theme Park) and is linked by monorail and surface transit to other guest areas.

DISNEY-MGM STUDIOS THEME PARK

Lights, cameras and all the action of Hollywood filmmaking are "on stage" for visitors to the combination movie park/motion-picture, television and radio production facility. Shows and attractions are based on elements of show biz, while a backstage studio tour takes guests into a magicland of backlots, special effects areas and soundstages. Themed restaurants such as the 50's Prime Time Cafe and Sci-Fi Dine-In Theater Restaurant, unique Hollywood-style shops and street entertainment which takes its cue from vintage Tinseltown characters add an extra layer of magic to a park visit. Attractions include The Great Movie Ride, the Backstage Studio Tour, SuperStar Television and the Monster Sound Show (both presented by Sony), the Indiana Jones Epic Stunt Spectacular, Star Tours (presented by M&M's Chocolate Candies) and Jim Henson's Muppet*Vision 3D.

MAGIC KINGDOM RESORT AREA/MONORAIL RESORTS

Surrounding the Magic Kingdom are five themed resorts -- Disney's Grand Floridian Beach Resort, Disney's Contemporary Resort, Disney's Polynesian Resort, The Disney Inn and Disney's Fort Wilderness Resort and Campground. They contain 3,093 guest rooms, modern conference and banquet facilities, and 1,192 campsites for recreational vehicles, tents and vacation trailers. Also within the resort area: Discovery Island tropical gardens and zoological park, River Country water park, beaches, lakes, pools and forest park lands. The areas are joined by a transportation network -- with the Contemporary, Polynesian and Grand Floridian offering the convenience of resort-side monorail stations.

Fort Wilderness Campground covers 730 acres of pine and cypress forest. In addition to 785 campsites for recreational vehicles and tents, it offers 407 suite-trailers for nightly rental. Recreation includes tennis courts and swimming pools, streams for canoeing, beach, marina, horseback riding, nightly campfire entertainment and trading posts stocked with camping supplies and groceries.

EPCOT RESORT AREA

Two of America's pre-eminent architects, Michael Graves and Robert A.M. Stern, have created a haven for both vacation-bound families and convention-bound groups. The Graves-designed Walt Disney World Swan (758 rooms) and Walt Disney World Dolphin (1,514 rooms) feature a combined 254,000 square feet of meeting space. The Stern-designed Disney's Yacht Club Resort (635 rooms) and Disney's Beach Club Resort (580 rooms) have 73,000 square feet of meeting space. The resorts are conveniently situated just southwest of Epcot Center on a 25-acre lake and are connected to the theme park by a new International Gateway to World Showcase. The resorts are also just a water-taxi ride away from Disney-MGM Studios Theme Park.

Also part of Epcot Resort Area: Disney's Caribbean Beach Resort, 2,112 rooms in five villages on a 200-acre site.

DISNEY VILLAGE RESORT AREA

Disney's newest themed resort, the Official Hotels of Walt Disney World and a variety of comfy vacation villas combine to provide a wide selection of accommodations in the host community of Lake Buena Vista.

Lush courtyards and brick lanes remindful of the French Quarter welcome guests to Disney's Port Orleans Resort, a 1,008-room, moderately priced hotel which opened summer 1991. Due in 1992: The 2,048-room Disney's Dixie Landings Resort with villages themed to stately Southern manor homes and backwoods bayous.

The seven "Official Hotels of Walt Disney World" -- Grosvenor Resort, Hotel Royal Plaza, Howard Johnson Resort Hotel, Travelodge Hotel, The Hilton, Buena Vista Palace and the Guest Quarters Suite Resort -- feature 3,735 guest rooms, resort recreation and convention facilities. Disney's Village Resort offers four types of one- and two-bedroom villas nestled in woodlands overlooking streams, parks and beautiful golf fairways. Many of the 585 units have kitchens.

Banquet facilities and meeting rooms for up to 500 guests are included in the Walt Disney World Conference Center. All the resorts are located near the Disney Village Marketplace/Pleasure Island shopping and nightclub area.

PLEASURE ISLAND/DISNEY VILLAGE MARKETPLACE

The Disney Village Marketplace features fine shops and restaurants adjacent to the Pleasure Island nightclub theme park, which includes entertainment for the 18-and-older crowd at six nightclubs plus shops and restaurants. Free shuttle-bus service links the Village to all other guest areas.

THE MAGIC LINKDOM

Just for the "golfanatic," Disney's golf facilities feature five championship courses and a total of 99 holes. Latest additions (slated for first play in January 1992) are courses designed by celebrity architects Pete Dye and Tom Fazio. Their Osprey Ridge (Fazio) and Eagle Pines (Dye) courses are located near Disney's Fort Wilderness and Dixie Landings resorts at Bonnet Lakes Golf Club. They supplement three Joe Lee-designed courses -- the Magnolia, Palm and Lake Buena Vista -- that annually host the PGA Tour's Walt Disney World/Oldsmobile Golf Classic. Rounding out the Magic Linkdom is a nine-hole family-play course located at The Disney Inn with the Palm and Magnolia courses.

TYPHOON LAGOON

The 56-acre Typhoon Lagoon water theme park boasts a 95-foot mountain as its centerpiece. Guests "scale" the mountain by stairs but come down its sides on eight water slides and white-water tubing flumes. A two-and-one-half-acre wave-making lagoon lies at the base of the mountain, and its waves -- up to 6-feet -- ride body surfers to new peaks of water fun. The park also includes the 362,000-gallon Shark Reef, in which guests snorkel in a saltwater paradise alongside fish, rays and other reef creatures. The park also includes Castaway Creek, a meandering, 2,200-foot rafting stream encircling the complex, and a special water-play area for children.

RIVER COUNTRY AND DISCOVERY ISLAND

Located in Fort Wilderness, River Country is an old-fashioned swimmin' hole with water slides, flumes, white water rapids, nature trail, heated swimming pool and white-sand beaches. Across the channel in Bay Lake is Discovery Island, an 11-acre zoological park featuring exotic birds and animals, colorful flowers and peaceful trails.

RESERVATIONS

All hotel and campground accommodations may be booked through Central Reservations, P.O. Box 10,100, Lake Buena Vista, FL 32830-0100. The telephone number: (407) W DISNEY. Special package vacations utilizing the Walt Disney World Village Hotel Plaza and other tours are available through the Walt Disney Travel Co., P.O. Box 22,094, Lake Buena Vista, FL 32830-2094. Advance reservations for "Hoop-Dee-Doo Revue," "Broadway at the Top," the "Polynesian Revue" and Disney character breakfasts may be made by guests holding reservations in Walt Disney World hotels through Central Reservations. Advance purchase of multi-day passports may also be made through that office.

TICKETS

Multi-day passports to the Walt Disney World theme parks are the most popular ticket media. One-day tickets also are available for the Magic Kingdom, Epcot Center or Disney-MGM Studios Theme Park individually. It takes four to six days to see a major share of the Magic Kingdom, Epcot Center and Studios.

LOCATION

Walt Disney World is located 20 miles southwest of Orlando along Interstate 4 with exits for the Walt Disney World Village, Epcot Center and (via U.S. 192) the Magic Kingdom and Disney-MGM Studios Theme Park. The Walt Disney World Information and Reservation Center is in Ocala, Fla., on Interstate 75 at State Route 200. Orlando is easily accessible by air, bus, train or automobile. Some 20 scheduled airlines and more than 30 charter carriers serve Orlando International Airport.

INFORMATION

Detailed information on Walt Disney World services and entertainment may be obtained from Guest Services in each of the resort hotels, at City Hall in the Magic Kingdom, at Earth Station in Epcot Center, in the Guest Services Building at Disney-MGM Studios Theme Park or by calling (407) 824-4321. Advance information and a helpful Vacation Guide may be obtained from Guest Letters, Walt Disney World, P.O. Box 10,040, Lake Buena Vista, FL, 32830-0040; Phone (407) 824-4321.

-30-

1199P:hia:DH

THE SATURDAY EVENING POST

14250

Four[illegible] Franklin

Oct. '82 $1.75

Patti (Reagan) Davis
Doing It Her Way

How the Stars
Stay Fit

Herpes Update

P&G's Bum Rap

How to Take
Your Own Blood
Pressure

Being Gay Is
a Health Hazard



Prevent Your
Heart Attack,
Nathan Kaplan,
M.D.

How to Sell
Your House
and Keep It,
Too

Saroyan
Fiction

Holland
on Two
Wheels

Sudden Infant
Death Syndrome

Spina Bifida

0 140165

2LBR7 17266 J2093 1 4N1 0 APR84
LIBRARY INFO SERV OF SEP
726 JACKSON PL NW
ATTN EDPH RM C-220 CR3 JS
WASHINGTON DC 20503

EPCOT CENTER: DISNEY'S DREAM COME TRUE

Whether it's 100 years in the future or a million years in the past, the new "thinking man's" theme park can take you there and back.

by Annetta Miller

On the evening of December 14, 1966, Walt Disney lay in a Burbank, California, hospital, weakened by a cancerous growth in his lung. With his brother and confidant Roy Disney at his bedside, Walt seemed intent on discussing a project that had become an obession in recent months: building an experimental city that would incorporate the best ideas of industry, government and academia worldwide.

His Experimental Prototype Community of Tomorrow (Epcot, as he had come to refer to it) would be a huge bubble-topped utopia, where the garbage would never need hauling, the thermostat adjusting or the grass mowing. Modern technology would be as warm and familiar as a favorite pair of slippers.

Disney's musings that night were to be the last words he would speak about his final and greatest dream. He died the following morning, December 15, 1966, of an acute circulatory collapse.

But 16 years later, Walt Disney's dream has become a reality.

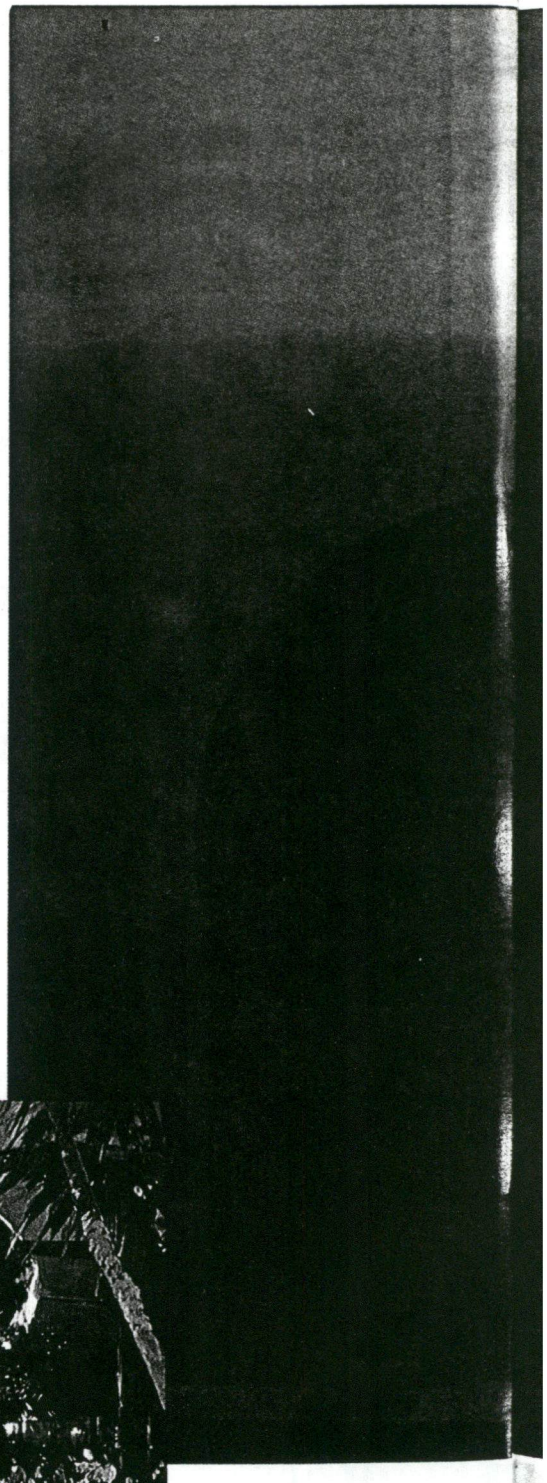
Epcot Center, the Disney organization's new 600-acre, $800 million theme park, is scheduled to open October 1 in Lake Buena Vista, Florida. Not the domed city Disney once envisioned—that idea was dismissed as impractical—its scope will be even more ambitious. Epcot offers the largest showcase of technology and exotica in the world.

Epcot is located just two and one-half miles north of Walt Disney World, and the two parks, along with all of Disney's on-site hotels, are connected by gleaming monorail.

Epcot is more than twice as large as its corporate cousin and has an identity all its own. Designed to appeal to more cerebral interests than does Disney World, Epcot has been dubbed "the thinking man's theme park."

While Disney World's emphasis will continue to be fun for fun's sake, Epcot will be fun for information's sake. Disney hopes to lure between seven and ten million new visitors to its gates each year by offering an educational as well as an entertaining experience.

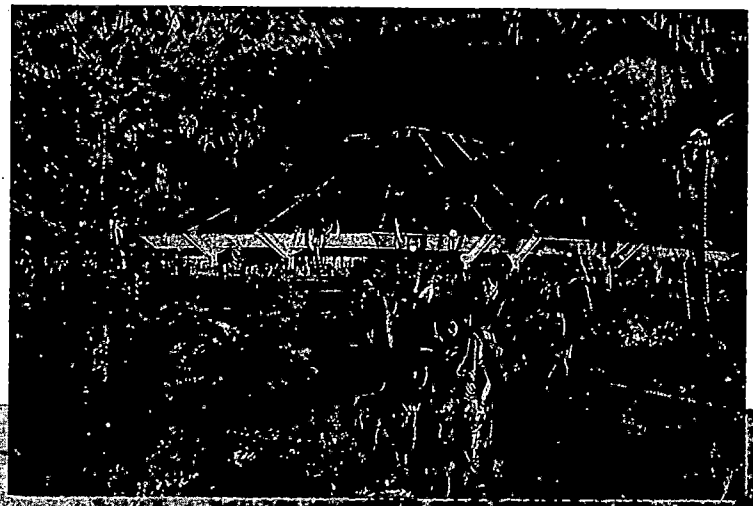
Epcot will be divided into two major sections: Future World, a series of corporate-sponsored pavilions designed to show the technological advances of the next 25 or so years, and World Showcase, a collection of villages from eight nations.





Communicore (below)—where you can have a friendly chat with computers—is a collage of today's reality and tomorrow's dreams. At the African pavilion (far right) you'll go on safari.

Upon stepping off the sleek monorail from the outlying parking lots, visitors will first encounter Future World's Communicore, a kind of space-age midway with shops and small technology-oriented exhibits. One display, sponsored by Sperry Corporation's Univac division, demonstrates how computers work and how they will run Epcot. Games—an American census quiz, a computer-aided design-a-



Epcot Center's Spaceship Earth, a colossal geodesic dome, marks the entrance to Future World. Beyond, visitors may travel back to the dawn of history, inspect a covered city of the future (above) and race on toward outer space.



roller-coaster game and a talking robot—feature some of the industries in Sperry's target market.

Future World's pavilions, the next stop on a visitor's journey, are no less awesome than Communicore. They have attracted an elite conglomerate of corporate sponsors including General Electric, Bell Systems, Kraft, Exxon, General Motors, Sperry, Eastman Kodak, Coca Cola, AT&T and American Express.

Many feature "ride-through" exhibits, treating visitors to enough push-button, light-flashing, mind-stretching activity to power a small city. In "Spaceship Earth," for example, Epcot-goers will spiral through a silvery, 18-story geodesic dome while seated in small self-propelled vehicles. Under the darkness of the world's largest projection dome, they will see Earth as a spaceship adrift in a midnight sky.

Other pavilions offer more down-to-earth wonders. "The Land," an agricultural exhibit, provides visitors a chance to see everything from bananas to shrimp grown using aquaponics, hydroponics and other futuristic farming techniques. "The Living Seas," set to open in 1984, will transport them in small bubble-shaped vehicles to a 5.7 million gallon underwater colony.

Though the exhibits look toward the future, they do not forget the past. A diorama in the energy pavilion takes visitors riding in solar-powered theater seats back to the primeval forests that were the source of today's fossil fuels. There they will come face to face with a lumbering Audio-Animatronic brontosaurus who moves, breathes and even slobbers on the unsuspecting audience.

Disney's artistry takes on an international flavor in World Showcase, separated from Future World by a sparkling lagoon. Here, visitors may breakfast on tea and biscuits in England, follow roads leading to Rome, lunch in a Bavarian beer garden where it's always Oktoberfest, explore the marvels of a Mayan pyramid, cross the vast expanses of Canada and the Great Wall of China, relax by a blue pond in the formal gardens of a Japanese pagoda and dine under a moonlit Eiffel Tower.

No expense has been spared in designing World Showcase. The Italian pavilion will feature a replica of St. Mark's Square, and France's will offer gourmet dining complete with imported chefs. But probably the most impressive show will be in the Chinese pavilion, where viewers will be encircled by a 360-degree, multidimensional movie. Mongol horsemen galloping across the plains, a camel caravan traveling Marco Polo's silk road and a 396-foot-tall Buddah are among the sights featured.

Unlike Future World, World Showcase has received little financial support from private industry. Several countries have contributed financing; others have sent experts and products instead. But the Disney organization itself is footing most of the bill.

If Epcot's show is impressive, perhaps more so is the behind-the-scenes work required to produce it.

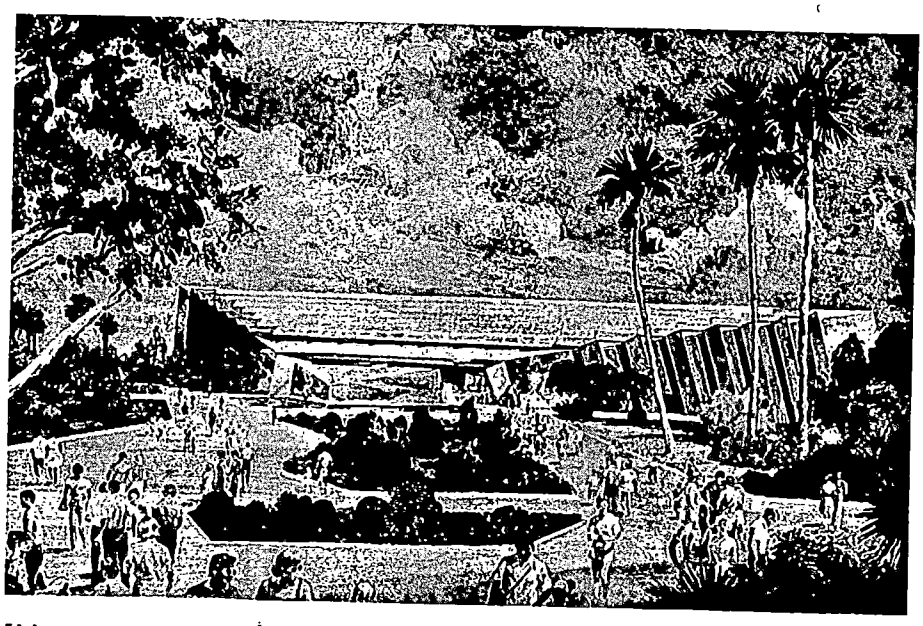
Engineering the creation of Epcot has been a staff of 1,800 artists, designers and engineers (Disney likes to call them imagineers) at Walt Disney Enterprises in Glendale, California. About 1,000 outside consultants have also been hired for the task, including noted science fiction author Ray Bradbury.

Much of the wizardry at Epcot—from the laser-generated special effects to the method of tallying the number of tons of popcorn sold in a month—will be computerized. Just how Disney planners create its ghostlike three-dimensional figures or its walking, talking characters is not open to discussion. ("It looks magical, and that is precisely why we don't talk about it," a Disney spokesperson says.)

Such is their attention to detail that even the sense of smell has been catered to. Disney designers have come up with ways to add appropriate scents to the displays, from the fragrance of orange blossoms in "The Land," to the whiff of an erupting volcano in the energy pavilion. To simulate the volcano's lava, the special-effects people had to create a substance that was not hot, yet glowed with fiery light and bubbled and congealed like the real thing. Everything was tested—from gelatin to a mixture of mineral oil and talc. The chemists finally came up with a proprietary blend they refer to simply as "orange goo."

Putting together the visionary Epcot has been a mammoth undertaking for Disney employees in both California and Florida. Its economic impact has been immense, especially in the Orlando-Lake Buena Vista area, where it has been influential in the growth of several new hotels and a $300 million airport terminal.

Epcot will not really be finished on opening day, however. Nor, in fact, will it ever be finished. As Walt Disney long ago envisioned, Epcot Center will remain in a constant state of evolution, with pavilions and exhibits that change as rapidly as mankind advances.



Using a multitude of dazzling effects, the Universe of Energy, sponsored by Exxon, will take visitors through the great geologic upheavals that trapped fossil fuels deep within the earth and on to examine the energy sources of the future.

OCTOBER 4, 1982 $1.50

TIME

DELAY OF GAME
The N.F.L. On Strike

ISRAEL
A Shaken Nation



Defense Minister
Ariel Sharon

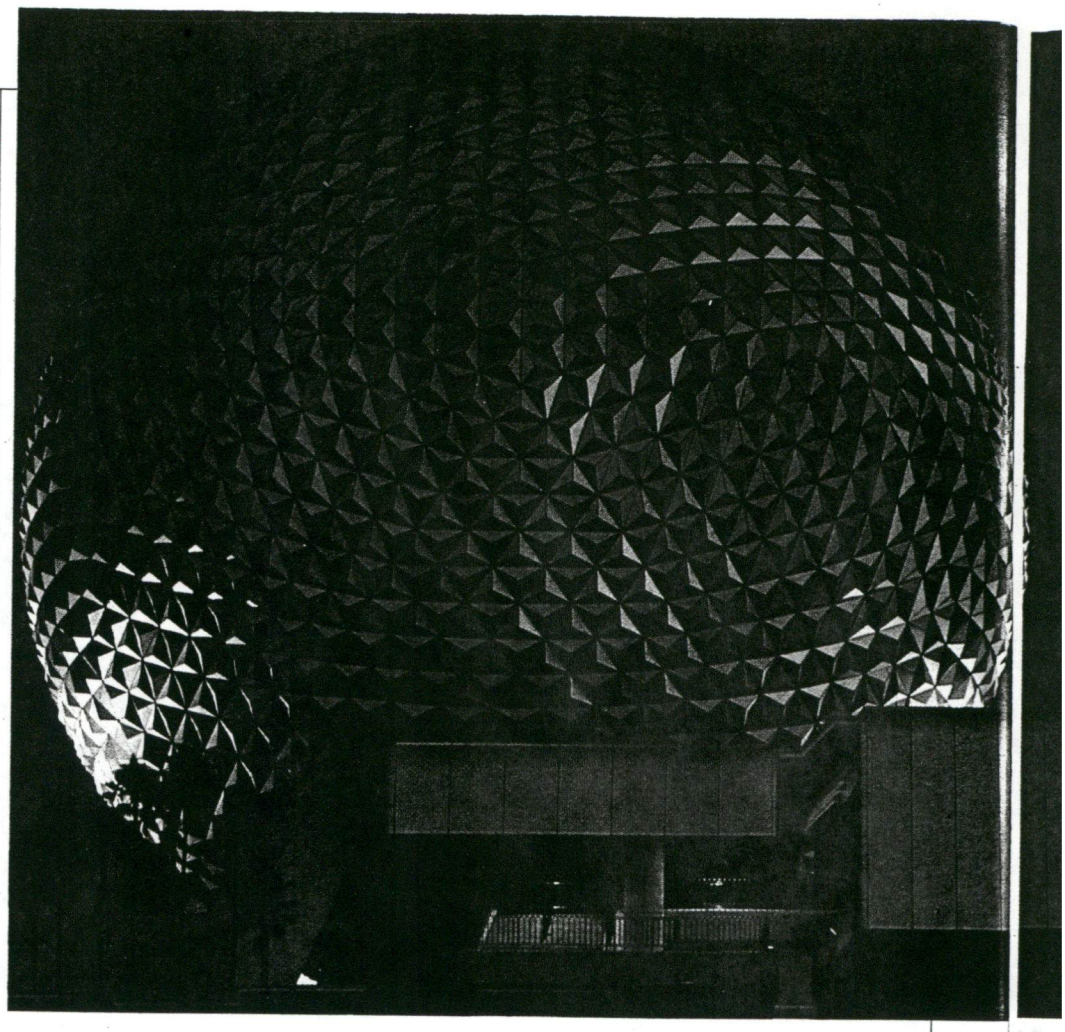
JUL84 000 JC7260701 52 DS
LIBR-INFO SERVS DIV DC
725 JACKSON PL NW
EPOW RM G220 NEOB
WASHINGTON DC 205
0600
724404

Disney's Last Dream

Epcot Center, a toytown to entertain and educate

Unlike Alexander the Great, Walter Elias Disney never ran out of worlds to conquer. This week, nearly 16 years after his death, the most ambitious of all the great fantasist's projects opens at Disney World in central Florida. Named Epcot Center, Disney's last, vast vision is a combination world's fair, theme park and dream factory executed at a cost to date of $900 million. Like the Magic Kingdom at Disney World and California's Disneyland, it is destined to become a part of the American experience, but with a difference. Unlike its predecessors, Epcot is aimed primarily at grownups. There are no Mickey Mouselings on the streets. Wine, beer and whisky flow, as they do not at other Disney theme parks. Epcot offers serious cuisine of several nationalities, in addition to fast food. And finally, a semiearnest air of education hangs over Epcot's 260 acres.

While Disney's successors have clung to the founder's ugly acronym (Epcot stands for Experimental Prototype Community of Tomorrow), they have departed from his utopian concept of a real-life community evolving in harmony with an ever changing and beneficent technology. What they have wrought is not the town but the adult toy of the future. Epcot is a mind-pummeling assault of electronic ingenuity, historical fact, fancy, showmanship, faith, hope and goo.



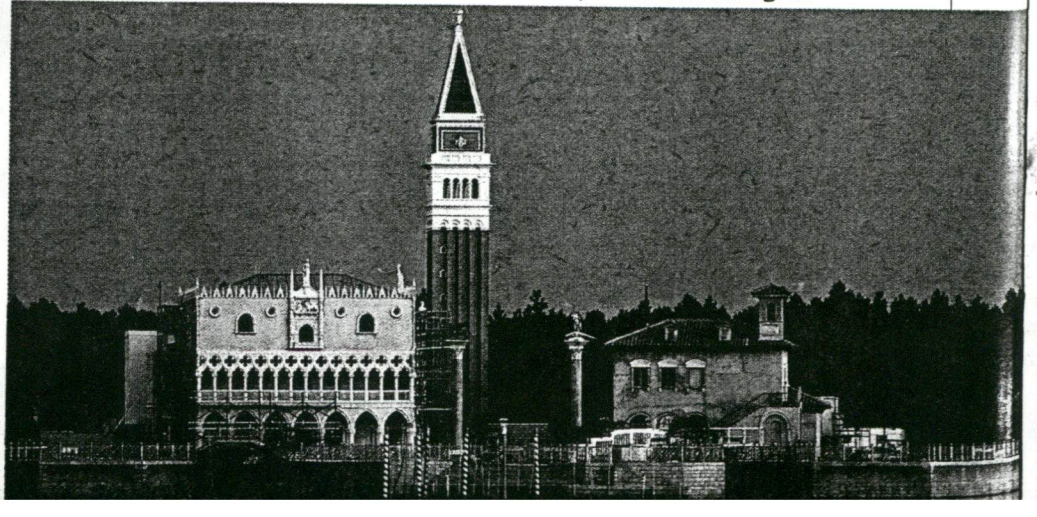
The fairway consists of two principal areas: Future World and World Showcase, both intended, in the words of Disney's trumpeters, to "satisfy the imaginative appetites of the tens of millions of people . . . destined to become 'Epcot travelers.' " Visitors enter through a building that is already a symbol of the center: an 18-story geosphere called Spaceship Earth. Inside they are whisked along a track to view a depiction of man's evolution in communications from cave to spaceship, glimpsing such wonders as Gutenberg's print shop, an Audio-Animatronic Alexander Graham Bell inventing the telephone, and astronauts at work.

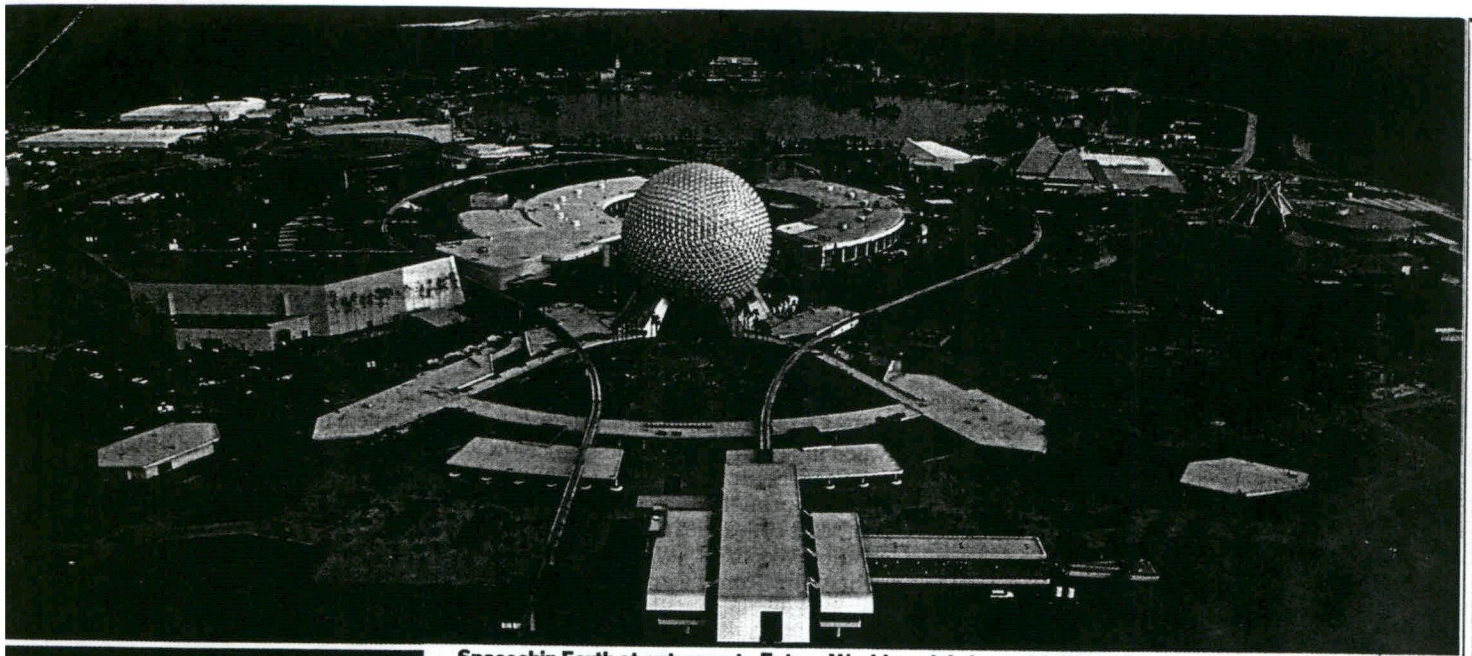
Radiating from Spaceship Earth are pavilions that explore other areas of technological endeavor. The World of Motion (sponsor: General Motors), nested within a wheel-shaped building, is a mostly lighthearted show with 24 Audio-Animatronic scenes depicting such momentous occasions as the invention of the wheel and the first traffic jam. The Universe of Energy (sponsored by Exxon) is a serious but compelling presentation whose three-acre roof with a partial photovoltaic surface is probably the largest privately built solar-energy collector in the world. Inside, life-size models of dinosaurs fight to the death; there is even an erupting volcano with 7,000 gal. of simulated lava and realistic odors that turn each eruption into a smell-



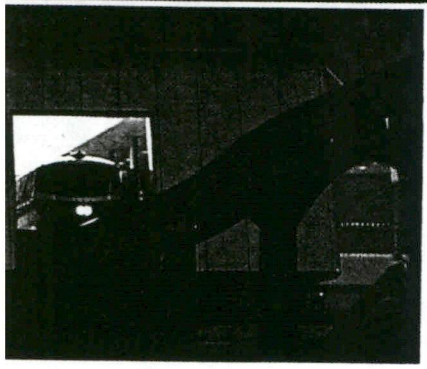
WOLFF—OUTLINE

A bionic policeman being readied for the World of Motion; Venice from the lagoon





Spaceship Earth at entrance to Future World; aerial view, with World Showcase in rear



drama. The lava is pumped by the same kind of machine that is used to shoot dog food into cans (it could be nicknamed the Alpo Volcano). The Land (sponsor: Kraft) manages to meld a boat tour, environmental subjects (topsoil loss, space-grown plants) and musical cutups by such Audio-Animatronic vegetable performers as the Colander Combo and the Kitchen Krackpots led by a human being, Bonnie Appetit.

Epcot's surest-fire hit is a pavilion called Journey to Imagination (Kodak) in which Disney's "imagineers" have pulled out all the computer stops. Guests star in their own video movies, press colored spots on the floor to create electronic music and engage in a kind of electronic finger painting with lasers. The pavilion features the only major new Disney character, the Dreamfinder, "older than wisdom and younger than the morning mist," who conducts the tour with a dragon named Figment.

From Future World, the Epcot traveler leaves the glitter of yesterday and tomorrow for a lake surrounded by slightly scaled-down scenes of eight countries and "Independence Hall" complete with an overview of the American past. There is a Mayan temple from Mexico, the Eiffel Tower and a street scene from Paris, Peking's Tiananmen Square and the Temple of Heaven, a small corner that will forever be a Hollywood pastel of England, a Japanese pagoda and minigarden, a St. Mark's Square with the Doges' Palace deliberately misplaced on the left instead of the right (to accommodate a neighboring Roman scene), Canadian Rockies settled snugly next to a Montrealesque hotel, and a Bavarian village in *Oktoberfest*. In France there is a restaurant bearing the imprimatur of Master Chefs Paul Bocuse, Roger Vergé and Gaston Lenôtre (a traditional veal or chicken dinner at about $12 is a fair buy), and the Italian pavilion replicates an Alfredo's of Rome restaurant, with passable fettucini.



Painting China figures

As with all Disney endeavors, the logistics strain the imagination. Some 54 million tons of earth were moved; 16,000 tons of steel were used, and 500,000 board feet of lumber went into the construction of the sets alone. Around the 40-acre man-made lagoon, 70 acres of sod have been laid, 12,500 trees and 10,000 shrubs planted. More than 1.5 million ft. of film were shot in 30 different countries and edited for more than four hours of shows. An entire new 3-D camera and projection system were invented for the 360° wrap-around show in the Imagination pavilion.

The Disney magic, of course, depends on a suspension of disbelief. There are no fanny pinchers on this Appian Way, no Red Guards in Disney's China, no air pollution in the Tokyo transplant. In the Land pavilion, the myriad plants have to be pollinated by hand: bees might gum up the works or sting the guests.

Despite, or maybe because of, the sanitizing, Epcot is bound to be a huge success. Though the new venture is more than half financed from its own assets, the Disney organization is no longer the magic profitmaker that Uncle Walt bequeathed. Disney films have flopped almost without exception since *Mary Poppins* in 1964; the organization's celluloid bid for adult acceptance, *TRON*, has yet to recoup its $22 million expenditure.

The recession and the declining appeal of its theme parks have reduced attendance at Disneyland and the Magic Kingdom. Epcot Center is expected to attract 9 million admissions its first year at a one-day price of $15. Disney strategy is to persuade guests to tarry at both Magic Kingdom (13.2 million admissions in 1981) and Epcot at a bargain four-day adult rate of $45 for the two, thus lengthening their stays. Epcot is designed to lure the 25-to-34 age group, the dominant force in the economy but one that has not responded strongly to previous Disney-style fantasy. While 75% of Florida visitors today do not attend Disney World, 80% of this group say that they would be attracted to a center like Epcot. Thus Disney should retain a powerful lock on the American imagination. His heirs can still say, as Walt used to, endlessly, "I count my blessings." —*By Michael Demarest. Reported by B.J. Phillips/Orlando*

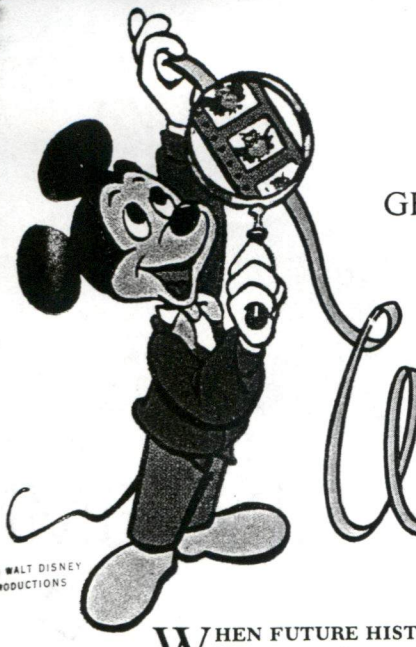


WOLFF—OUTLINE

An automated broccoli stalk being dressed

Electronic ingenuity, faith, hope and ...

August 1963



GENIUS OF LAUGHTER AND LEARNING

Walt Disney

WHEN FUTURE HISTORIANS sit down to choose a Hall of Fame for our time, there will be trouble over the name of Walt Disney.

Some judges will list him as an artist; others will call him an educator. Still others may insist that Disney belongs with the inventors, and some will argue that he was a naturalist.

Each, in my view, will have a point, for Walt Disney is all these things. But on one question the historians are bound to agree: Walter Elias Disney was a genius who brought laughter and knowledge to the world in a distinctive American way.

No country ever had such a corps of goodwill ambassadors as Mickey Mouse, the veteran trouper of 35 years; Donald, the irascible duck; Snow White and her delightful dwarfs; and Pluto the pup. Wherever they and their companions go—and there is scarcely a country that has not welcomed them—they bring laughter and enduring friendship.

Hard on the heels of Walt's antic cartoon animals came other, more serious stars—the beguiling beavers and otters of *In Beaver Valley*, the seals of *Seal Island*, the African lion, Perri the squirrel—actors not merely drawn but *taken* from life. Walt is a superb teacher of natural history, geography, and history. Disney's television characters, Davy Crockett and Johnny Shiloh, subtly taught history as they entertained.

I recently glimpsed the restless brilliance that drives Walt Disney to venture constantly into the new and the untried. We stood in one of his studios, and there Walt introduced me to Abraham Lincoln.

Unbelievably, the President put out his hand and gave me a warm handshake, as if he were receiving at the White House. Lincoln's eyes met mine, his lips moved, and I was greeted with a deep "How do you do?" and a slight bow. It was a startling, even an eerie, experience. I almost had doubts that this was only an electronically operated effigy.

Remembering how my deaf Grandmother Bell "heard" by reading the lips, I asked Walt how closely Lincoln's mouth actually shaped the words I had heard. For answer Walt turned to an assistant.

"Hear that? A great idea! Find someone who reads lips to tell us how good Lincoln's mouth is. I want him perfect!"

That was typical of Walt Disney. He seizes ideas and runs with them. Even Disneyland began this way.

"Like every father, I used to take my children to an amusement park," he told me, "and I'd be bored to death. Nothing for me to do. And I'd think, why doesn't someone develop a park where the parent can enjoy himself with the children?"

Millions of other parents must have had the same thought. The difference is, Walt Disney did something about it. He dreamed of an amusement park where family groups—children, parents, and grandparents—could go and have fun together, and then he built it. And as everyone knows, the lure of Disneyland now reaches even to Moscow.

How highly Walt Disney is regarded by his fellow Americans was indicated last March when he received the George Washington medal, highest award of the Freedoms Foundation at Valley Forge. Former President Eisenhower, serving as Chairman of the Foundation's Board of Directors, made the presentation. He read a citation honoring:

"Walt Disney, Ambassador of Freedom for the U. S. A. . . .

"For his unfailing professional devotion to the things which matter most—human dignity and personal responsibility.

"For masterful, creative leadership in communicating the hopes and aspirations of our free society to the far corners of the planet."

Melville Bell Grosvenor

EDITOR

National Geographic Aug. 1963

SOUVENIRS
TOYS



KODACHROME © NATIONAL GEOGRAPHIC SOCIETY

The Magic Worlds of Walt Disney

By ROBERT DE ROOS

Illustrations by National Geographic photographer THOMAS NEBBIA

ONE AUTUMN EVENING in 1928, a new actor appeared at the Colony Theatre in New York in a movie called *Steamboat Willie,* the first cartoon ever produced with sound.

He had ears bigger than Clark Gable's, legs like rubber hose, a grin wider than Joe E. Brown's, and a heart of gold. His name was Mickey Mouse.

Beginning that night, Mickey and his creator, Walt Disney, grabbed the world's funny bone and have never lost their grip.

The New York *Times* praised the new film as "ingenious."

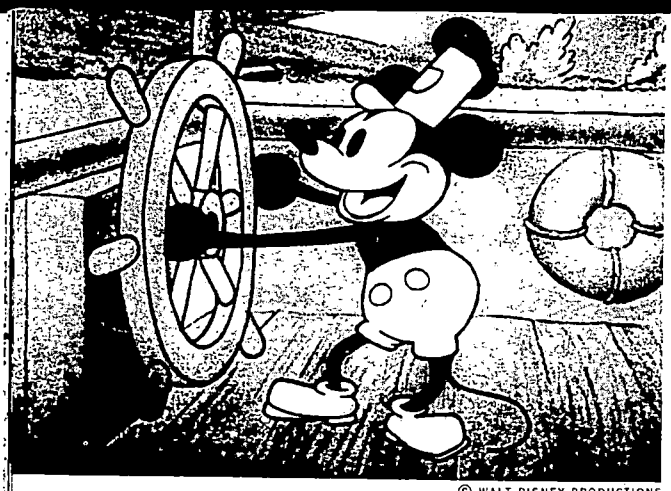
"A wow!" cried the *Weekly Film Review.*

Thus was born history's most influential mouse. Mickey led the way in the development of animation as a new art, to the exploration of the world of animals and faraway people and of their adventures and geography.

Mickey Mouse has skipped from triumph to triumph—always preceded by three words in big letters: "WALT DISNEY PRESENTS."

Mickey is featured in comic strips and books in 15 languages, became the star of television's Mickey Mouse Club, and, finally, founded a magic kingdom called Disneyland.

Host Walt Disney halts his old-fashioned fire truck on Disneyland's Main Street and gives autographs. Each year his magic kingdom near Anaheim, California, draws five million visitors.



© WALT DISNEY PRODUCTIONS

Mickey Mouse as Steamboat Willie Launches Two Fabulous Careers

First sound cartoon ever released, the Walt Disney short opened in New York in 1928. An international celebrity almost overnight, the wonder mouse led his creator to the pinnacle of show business. For years, the high-pitched, boyishly breathless voice emerging from the sound track was Disney's own, and of all his cartoon characters, Mickey remains closest to Disney's heart.



KODACHROMES BY NATIONAL GEOGRAPHIC PHOTOGRAPHER THOMAS NEBBIA © N.G.S.



Elephants really fly in Disneyland, a 20-year dream come true for its builder. Young at heart of all ages soar happily aboard Dumbo, a ride in Fantasyland.

Mechanical marvel, a macaw in Disneyland's Enchanted Tiki Room, talks, sings, cocks its head, and puffs out its chest. Xavier Atencio activates the bird with magnetic tape—a feature of the new technique of Audio-Animatronics devised by Disney's "imagineers" (pages 204-7).

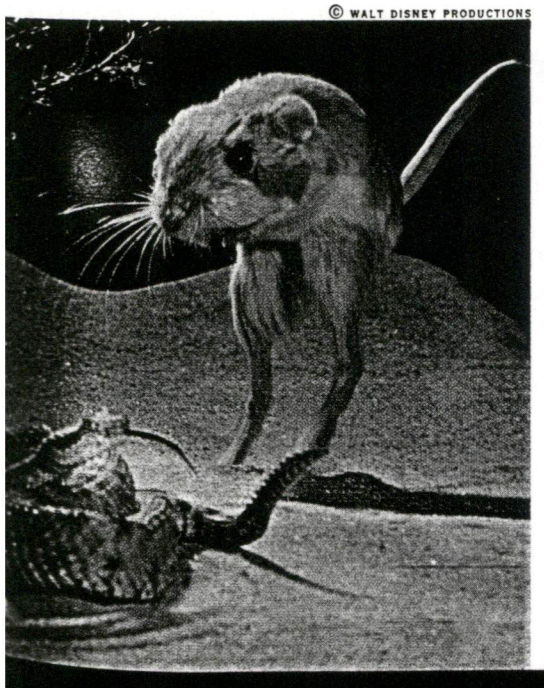




HS EKTACHROME © N.G.S.

Bathed by klieg lights, Hayley Mills goes before the cameras in *Summer Magic,* the fourth film the British actress has made for Walt Disney Productions. At 17 she receives thousands of fan letters weekly and has been called the world's best-known teen-ager.

Kangaroo rat's valiant battle with a rattlesnake enthralls viewers of Disney's first feature-length True-Life Adventure, *The Living Desert.* Leaping and dancing, the rat kicks up a small cloud of sand, driving the serpent away. The episode illustrates Disney's technique of capturing intimate moments in the lives of animals.



© WALT DISNEY PRODUCTIONS

He is Topolino in Italy, Mik-kii Ma-u-su in Japan, Ratón Mickey in Mexico, Micky Maus in Germany, Mikki Hiiri in Finland, and just plain Mickey in scores of other lands. He is known around the world—always with approbation and love.

Mickey, a versatile fellow, has been everything from farmer and magician to great lover and fire chief. He has directed planets and comets in their courses. He has defied time, space, and gravity. But, though bound to win, he has always fought the clean fight.

True to character, "Mickey Mouse" was the designation in World War II for diagrams of convoy movements toward Normandy's D-Day beaches, and Mickey rode into battles as the insigne on hundreds of ships and planes.

When King Bhumiphol of Thailand presented Walt Disney with a medal, he said quietly for Walt's ear alone: "This is an honor from my government, but more than that, it comes from me. I grew up on your cartoons."

Franklin Roosevelt demanded Mickey in the White House. Dowager Queen Mary of Britain liked to find Mickey on the bill whenever she went to the movies.

It can be said that Walter Elias Disney, the man, and Mickey, the mouse, have made a lasting impact on mankind.

700 Awards From Around the World

Last fall, in Walt Disney's outer office at the studio in Burbank, California, I got a glimpse into the dimensions of this durable pair, 35 years after the mouse clicked in the fertile Disney mind.

In cases ranged along the walls, on shelves and tables are some of the more than 700 awards the Disney organization has received (page 167). There are dozens of medals, citations, and plaques from appreciative governments attesting the international amity created by Disney's make-believe characters —Mickey, Donald, Goofy the dog, and all the others.

Walt once sent a proud director home with a newly won Oscar. "How did the family like it?" he asked next day.

"The kids weighed it first thing," the director said. "You might like to know an Oscar weighs 6 pounds, 12 ounces on our bathroom scale."

The Author: Free-lance writer Robert de Roos has contributed two previous articles to the GEOGRAPHIC—"Los Angeles" (October, 1962) and "Booming Arizona" (March, 1963). He is a former newspaperman and the author of four books.

The awards from the film industry mean most to Walt. But he is proud that conservation groups have also recognized his interest in protecting wildlife. He is proudest, perhaps, of the Audubon Society Medal awarded in 1955.

Walt's office has become so crowded that recently four cabinets of awards were placed in the studio commissary. Some of the employees promptly nicknamed the commissary "the awards room."

Disney Films Used in Teaching

Although Walt constantly denies he is an educator, his nature films, which he calls True-Life Adventures, have received accolades from educators. Films like *Seal Island, In Beaver Valley,* and *The Living Desert* were pioneering achievements. Walt's early edict for them and all the True-Life Adventure pictures was to get the complete natural history of the animals with no sign of humans: no fences, car tracks, buildings, or telephone poles. This concept, plus the intimacy, the extreme close-up view of the animal, completely won the public.

The True-Life Adventures; films of the nomadic Blue Men of Morocco, Japanese fishermen, Siam, the Alaskan Eskimo, and Switzerland; Donald Duck's adventures in Mathmagic Land; the man-in-space series, with technical advice by Wernher von Braun; Disney safety films, and many others are a solid part of the curriculum for thousands of school children, not only in the U. S. but abroad—including countries under Communist control.

I first saw Walt Disney sitting at a low coffee table, wearing his usual working garb: a short-sleeved sport shirt with a woolen tie, slacks, and a sleeveless alpaca sweater.

An aerial photograph of Disneyland dominated one wall. There were photographs of his family, including his five grandchildren; the Disney coat of arms; his first Academy Award.

"That first Oscar was a special award for the creation of Mickey Mouse," he said. "The other Academy Awards belong to our group, a tribute to our combined effort. The whole thing here is the organization. And the big problem was putting the organization together.

"Look at Disneyland," he went on, waving toward the aerial photograph. "That was started because we had the talent to start it, the talents of the organization."

"What's your role?" I asked.

"You know, I was stumped one day when a little boy asked, 'Do you draw Mickey Mouse?' I had to admit I do not draw any more. 'Then you think up all the jokes and ideas?' 'No,' I said, 'I don't do that.' Finally, he looked at me and said, 'Mr. Disney, just what do you do?'

" 'Well,' I said, 'sometimes I think of myself as a little bee. I go from one area of the studio to another and gather pollen and sort of stimulate everybody.' I guess that's the job I do. I certainly don't consider myself a businessman, and I never did believe I was worth anything as an artist."

Until a few years ago, Walt was president of the company, Walt Disney Productions. He resigned and was made board chairman. His older brother Roy became president. Then Walt, tired of signing things, resigned as chairman too.

Walt laughed at the memory. "Now my only title is executive producer. I'm the boss of everything that's produced here. I work on story ideas and gags; I work on every script, writing dialogue and planning scenes. When the story is set, I turn it over to the boys, and they make it.

"We film 25 new stories for television and six feature-length pictures a year—and, of course, we think up ideas for the park, Disneyland. The corporation gets its vitality from what we create."

The corporation exhibits considerable vitality: In 1962 this magic world showed a gross income of $74,059,000—more than $20,000,000 from Disneyland alone—and a net of $5,263,000.

The Secret Life of Mickey Mouse

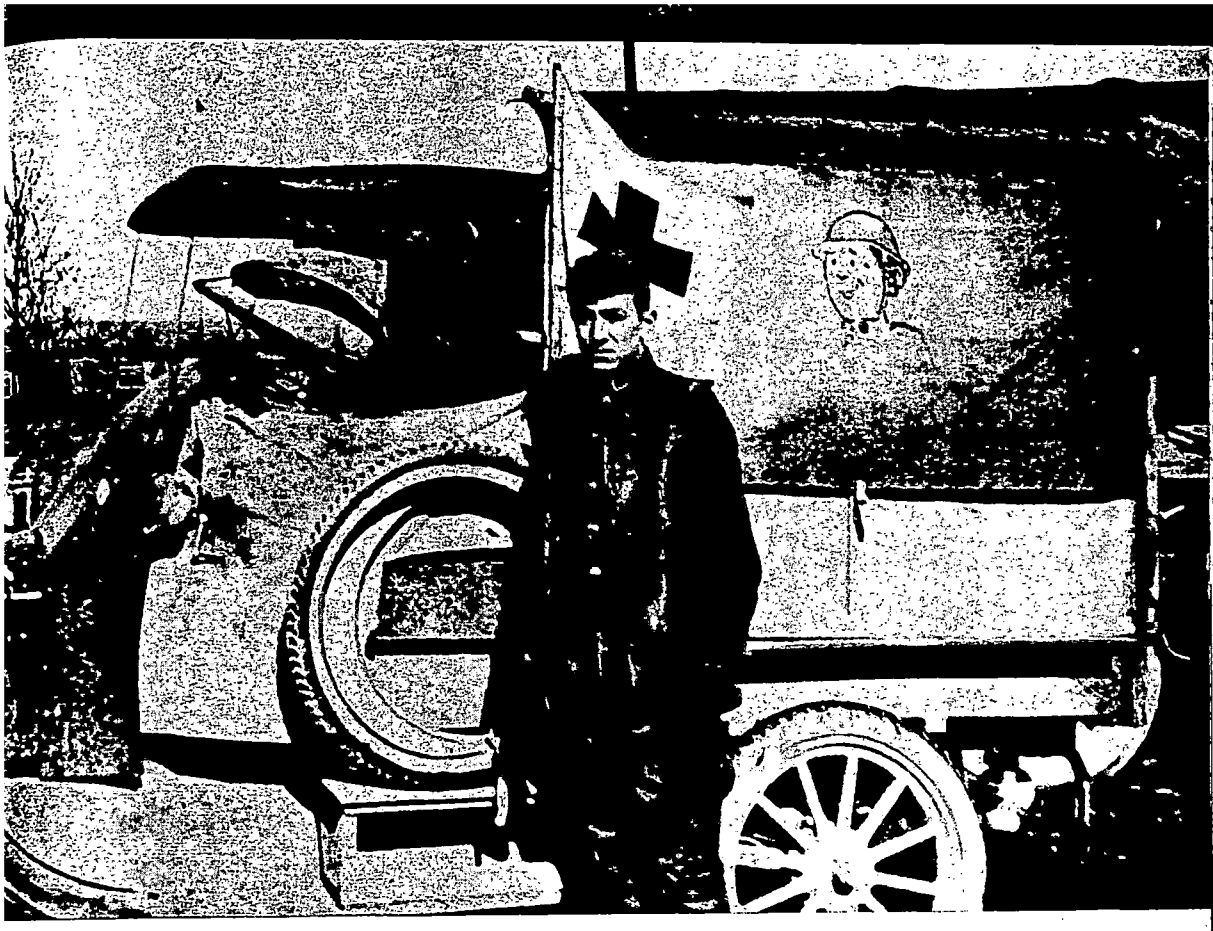
All this vitality stems from a mouse that was conceived in desperation, gestated in secrecy, and almost died at birth.

In the fall of 1927, Walt Disney returned to Hollywood from New York without a staff and without a star. He had gone east to negotiate a new contract for his series Oswald the Rabbit. His distributor refused to meet his price and threatened to lure his whole organization away.

"I've already signed all your animators," the distributor told Walt.

Walt and Lillian Disney, his bride of two years, had a doleful trip across the continent. Walt needed a whole staff of animators. He also needed a new character—fast.

The idea for Mickey Mouse was born on



Too young to enlist in the Armed Forces in World War I, 16-year-old Walt Disney volunteered as a Red Cross ambulance driver. He arrived in France shortly after the Armistice and drove everything from this cut-down ambulance to five-ton trucks. His salary: $40 a month. But he made extra money by painting the Croix de Guerre on soldiers' leather jackets at 10 francs each. Drawing on the ambulance canvas is Disney's work.

© WALT DISNEY PRODUCTIONS



1923: Young Cameraman Shoots Footage in a Hollywood Backyard

From Kansas City, Missouri, Disney followed his artistic star to California. His equipment: boundless ambition hitched to a fantastic imagination. With his brother Roy he started making animated cartoons in a dingy office. Experience gained from the first shorts—Alice in Cartoonland and Oswald the Rabbit—gave birth to Mickey Mouse. Here he tests an early movie camera, a Pathé model.



© WALT DISNEY PRODUCTIONS

Story session of the 1930's runs late into the night as Disney (center) and his staff plan a Silly Symphony cartoon. Rough drawings, tacked to the board, outline the basic plot. Pinto Colvig, pointing with pencil, originated the voices of Goofy, the affable dog, and two of the dwarfs, Grumpy and Sleepy, in *Snow White* (opposite).

the train. "I've got it," Walt told Lilly. "I'll do a series about a mouse. I'm going to call him Mortimer Mouse."

Lilly Disney frowned. "I like the idea, but Mortimer sounds too dignified for a mouse."

Walt thought a few minutes. "All right, we'll call him Mickey Mouse. Mickey has a good, friendly sound."

In Hollywood, Walt and Roy Disney and chief animator Ub Iwerks, now director of technical research, began work on Mickey. The defecting animators were still at the studio finishing the Oswald contract, and Walt did not want them to know he was starting a new series. So Ub Iwerks was sequestered in a locked office, and there in four hectic weeks, he animated an entire Mickey Mouse cartoon.

That first Mickey was entitled *Plane Crazy,* a bit of nonsense inspired by the Lindbergh flight. To get the drawings inked and painted on celluloid for the camera, Walt set up tables in his garage at home. There, Lillian Disney, her sister, and Roy's wife Edna did the job. A cameraman returned to the studio at night to put the pictures on film.

When Walt took the movie to New York, distributors were not interested. They were also not interested in a second Mickey, produced while Walt was traveling.

Mickey Saved by Plinks and Toots

Mickey was close to death. But he was literally saved by the bell—bells, whistles, plinks, and toots. Sound had made its first real impact on motion pictures with the release of *The Jazz Singer* in the fall of 1927. Walt decided to try it.

He and Iwerks rigged a homemade radio with a microphone. They put up a white sheet as a screen and, with two helpers, stood at the mike behind it with noisemakers, a mouth organ, and a xylophone. For six hours, Roy projected a short bit of animation from *Steamboat Willie,* the third Mickey film. The sound

Princess Holds Court in a Forest Glen: *Snow White and the Seven Dwarfs*

Audiences throughout the world are still charmed by this idyllic tale of a fair young princess threatened by a cruel queen and befriended by lovable dwarfs. The 1938 film, Disney's first feature-length cartoon, has been reissued three times in the United States alone. Two of its nine songs, "Heigh Ho" and "Just Whistle While You Work," now rank as perennial favorites of popular American music.

© WALT DISNEY PRODUCTIONS



makers watched the image and whanged away. It was ragged, but it convinced them that sound was for cartoons.

Walt hurried to New York with the film, and there *Steamboat Willie* was completed with sound. And it was ingenious and funny sound which transcended the mere novelty of actors singing or mouthing lines.

Sound was added to the first two Mickeys. Suddenly and dramatically, everybody wanted the talking mouse.

Walt and the mouse have come a long way since. Nothing about Walt Disney's background easily explains his success, though he began to draw at an early age.

His father, Elias Disney, was a carpenter in Chicago when Walter Elias Disney was born there in December of 1901. When Walt was four, the family—there were three older brothers and a younger sister—moved to Marceline, Missouri. Walt still recalls the horsecar ride to the railroad station.

At Marceline, one of Walt's first chores was to herd the pigs on the family farm. The Disneys were forced to sell the farm, and in 1910 moved to Kansas City, Missouri. There

© WALT DISNEY PRODUCTIONS

EKTACOLOR BY NATIONAL GEOGRAPHIC PHOTOGRAPHER



Child star Shirley Temple presents producer Walt Disney with a special award for *Snow White*—an Oscar and seven miniature Oscars—at ceremonies of the Academy of Motion Picture Arts and Sciences in 1939.



Accolades from around the world surround Disney. His collection of more than 700 includes 28 Oscars, 5 Emmys from the National Academy of Television Arts and Sciences, and the Irving Thalberg Memorial Award of 1942 for "the most consistent high quality of production achievement." Cut-glass-and-silver pitcher is a tribute from the First Soviet Cinema Festival in 1935.

Walt's father bought a paper route with 800 customers. Roy and Walt were delivery boys. They started work at 4:30 in the morning and made their rounds on foot.

The family moved back to Chicago in 1917. Walt went to high school, attended the Academy of Fine Arts, and took correspondence courses in cartooning. He also worked at the post office sorting mail and delivering letters.

"As long as I can remember, Walt has been working," Roy Disney told me. "He worked in the daytime and he worked at night. Walt didn't play much as a boy. He still can't catch a ball with any certainty."

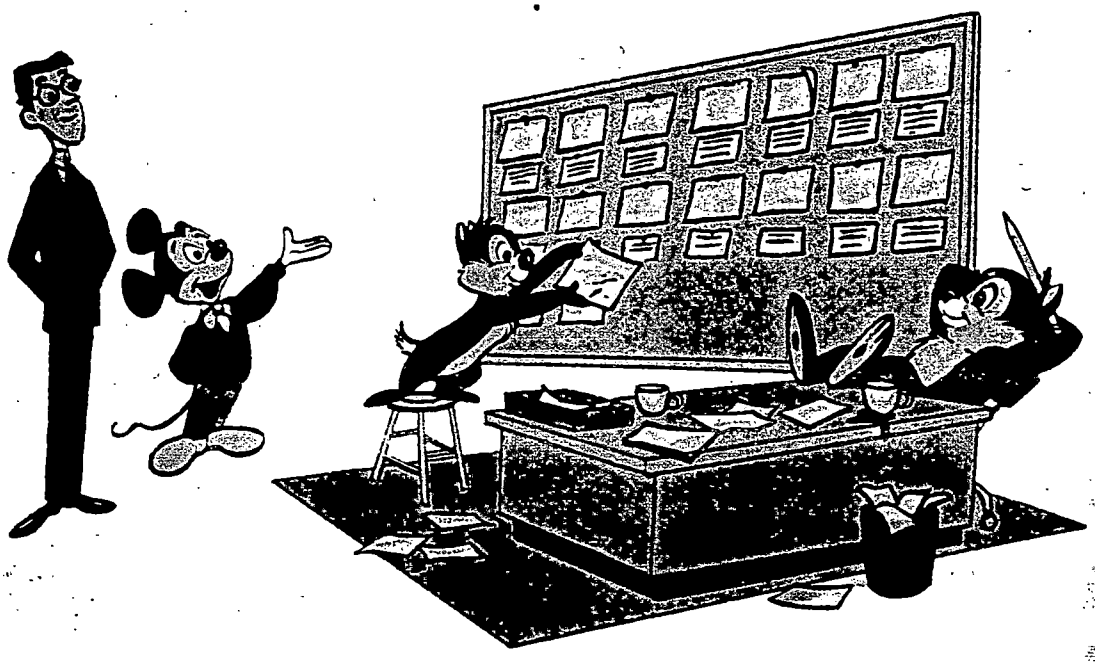
When Walt was 16, he joined an American Red Cross

(Continued on page 173)

"How do you make cartoons?" asked the GEOGRAPHIC Editor. In answer, the master himself picked up the telephone and summoned this rollicking troop of world-famous Disney characters. Full of squeaks and quacks, smiles and frowns, they play the roles of their animator-creators—and with high good humor poke a bit of fun at them. A pleased Walt Disney signed this GEOGRAPHIC original.

G.S.

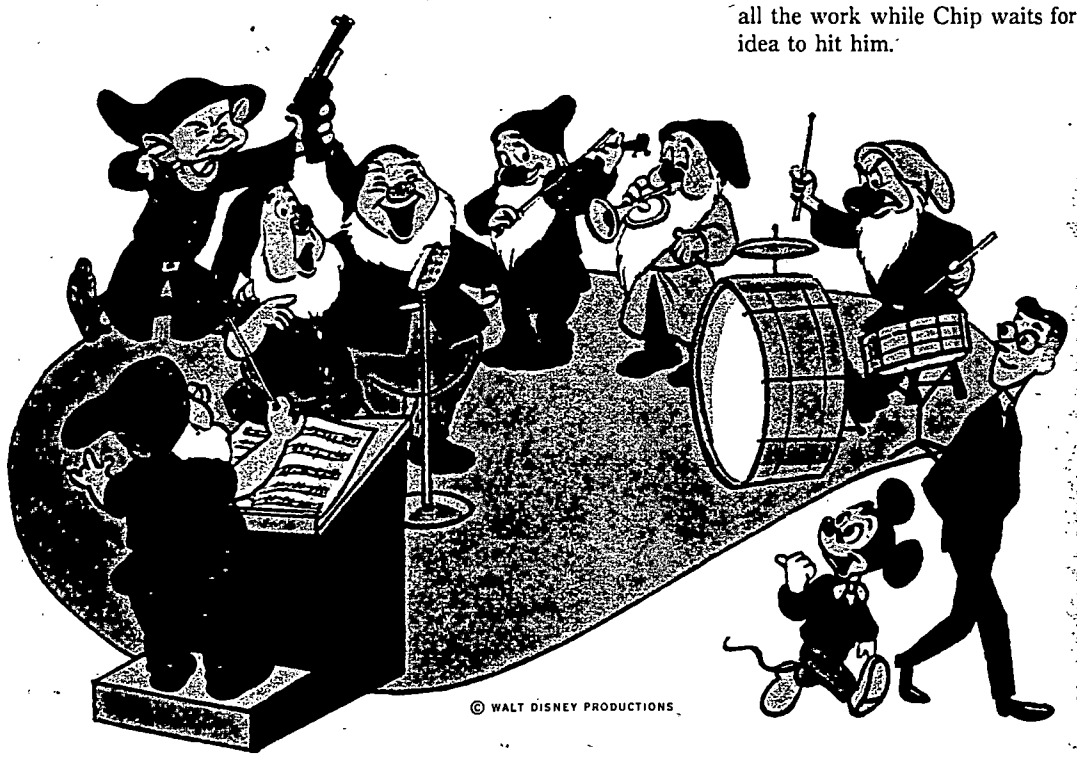




ANIMATION

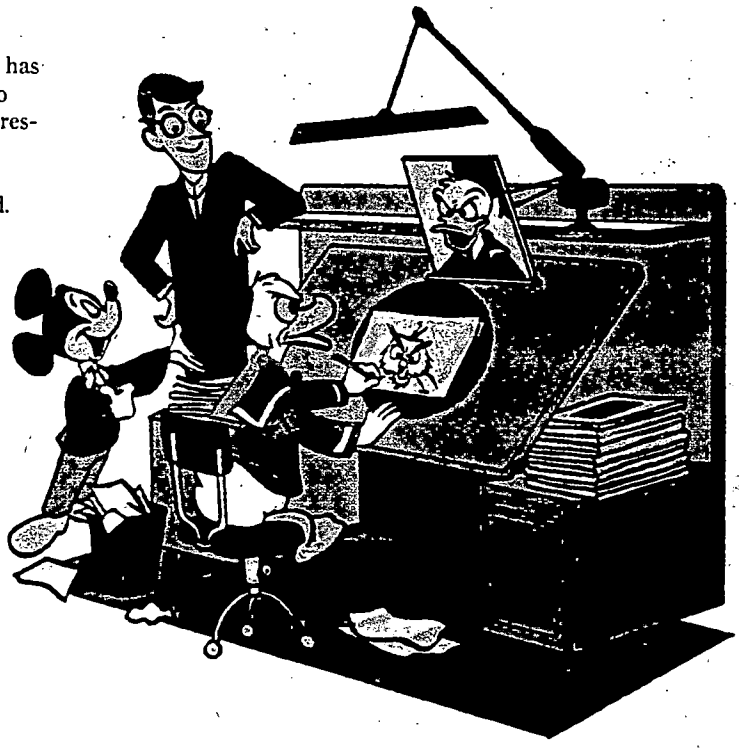
Mickey Mouse explains the art to Mr. G. O. Graphic

1. Hi, Mr. G. O. Graphic—welcome to Walt Disney Studio! If you'll just follow me, I'll show you how we make our cartoon motion pictures. We start right here in our STORY DEPARTMENT. Whenever Chip and Dale get an idea, they develop it with story sketches, then pin the sketches up on a storyboard like a comic strip. They're working on our feature-length cartoon *The Sword in the Stone.* Looks like Dale is doing all the work while Chip waits for an idea to hit him.



2. In the SOUND DEPARTMENT we record our music, sound effects, and voices. Music is important in telling a story, to give it the right mood and atmosphere. And it takes a lot of auditioning sessions to select the right voice to fit a cartoon character's personality.

3. The ANIMATOR is the artist who puts life into a cartoon character. He has to be somewhat of an actor himself to catch just the right movement or expression in a mirror and draw it. The DIRECTOR—that's me—tells the animator how he wants the scene played. At times, Donald here has to play a crocodile or maybe an elephant. Don't be alarmed if he starts to hoot and flap his arms; today he happens to be Archimedes the Owl. To get an idea of what the real animals look like, our animators often refer to photographs in your NATIONAL GEOGRAPHIC.

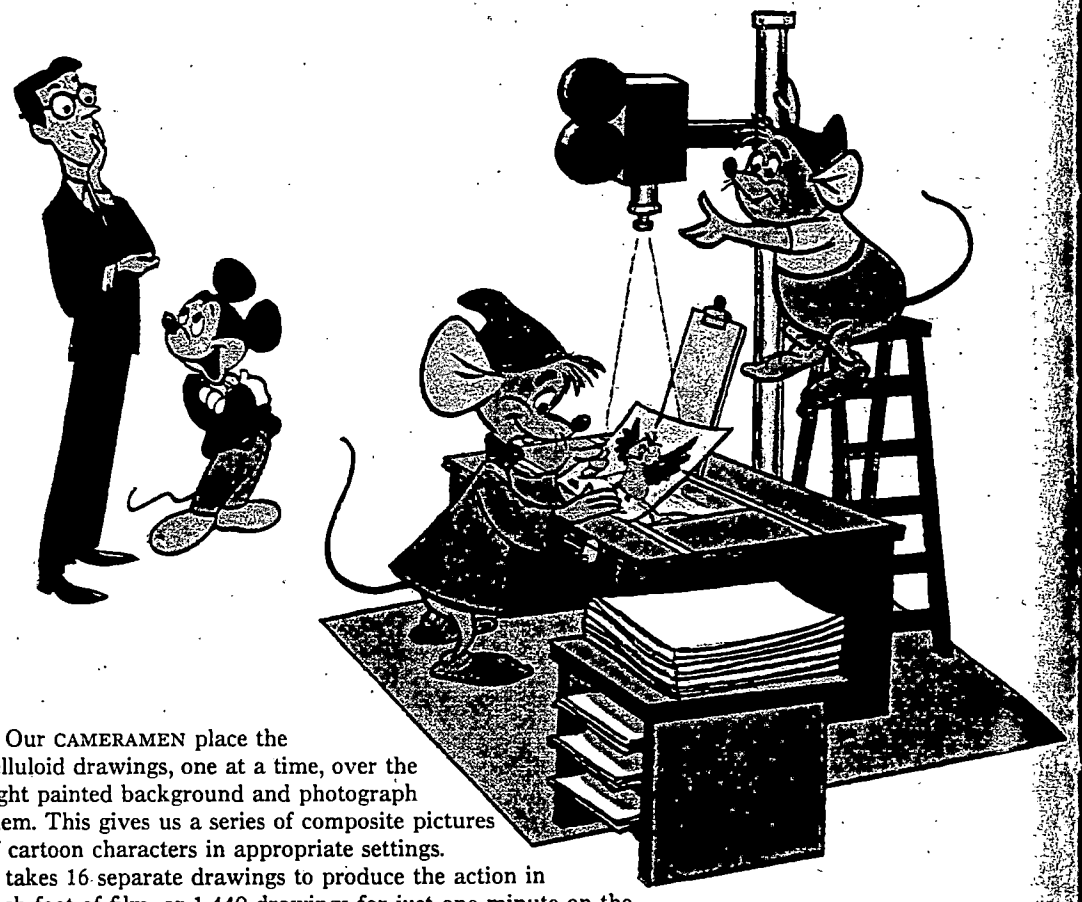




4. This artist—maybe you recognize him, he's been with us a long time—is painting a background drawn by a LAYOUT MAN. Goofy gets more paint on his smock than on the paper. It looks messy, but he calls it "artistic license."

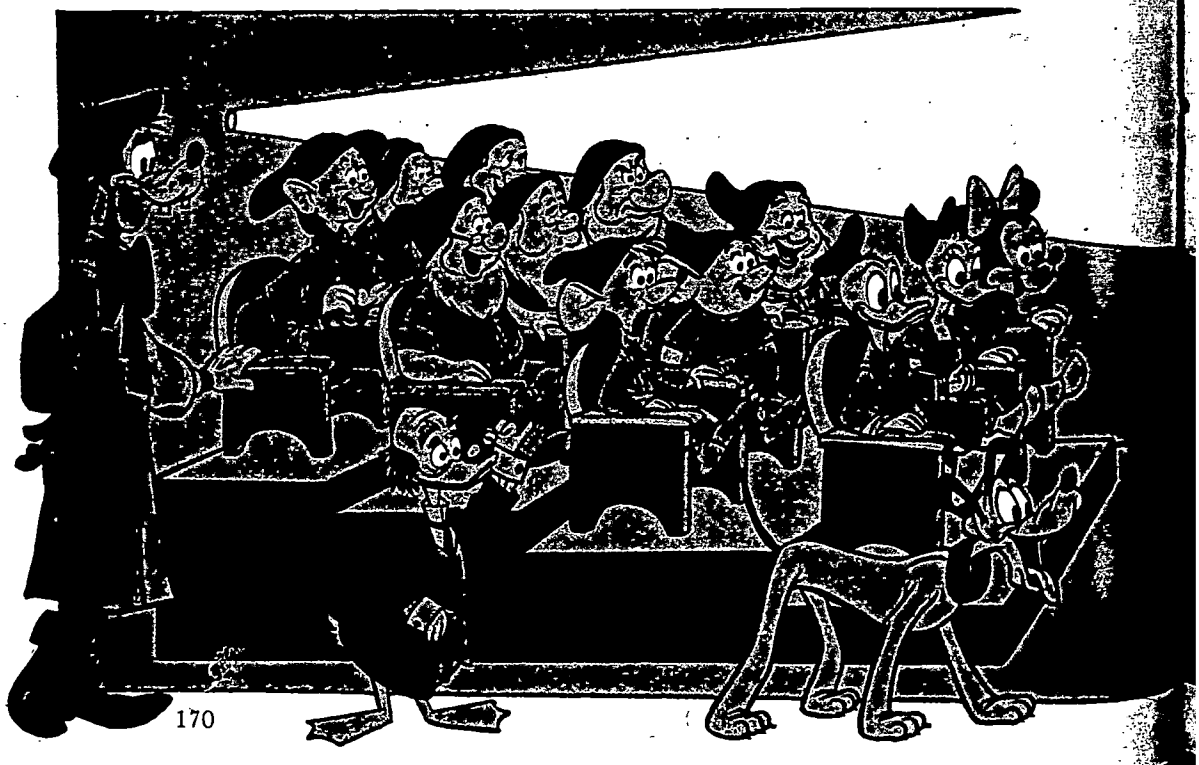
5. These pretty little girls are INKERS and PAINTERS. They trace the animator's drawings onto sheets of transparent celluloid. They use a COLOR MODEL GUIDE to paint the proper colors.

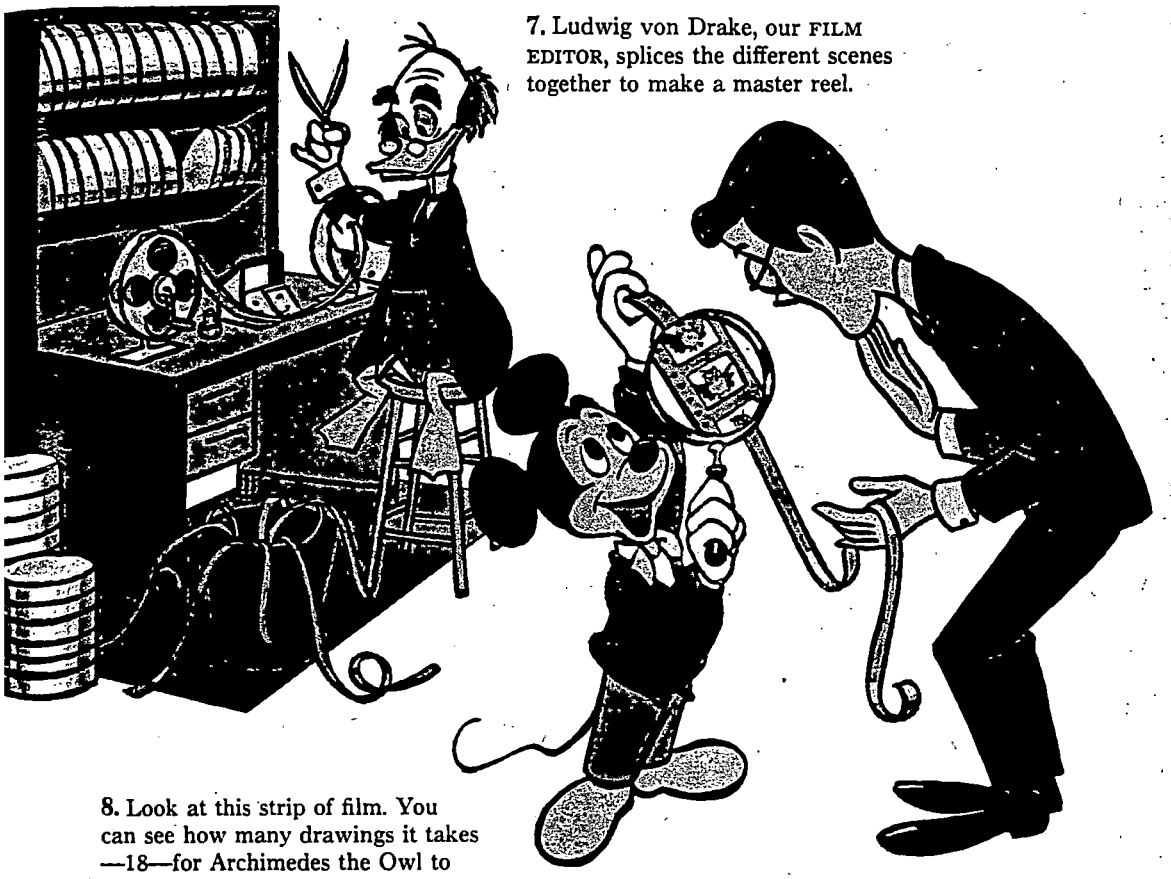
© WALT DISNEY PRODUCTIONS



6. Our CAMERAMEN place the celluloid drawings, one at a time, over the right painted background and photograph them. This gives us a series of composite pictures of cartoon characters in appropriate settings. It takes 16 separate drawings to produce the action in each foot of film, or 1,440 drawings for just one minute on the screen. You can see that a feature-length film runs into thousands of drawings—and a big budget! In *The Sword in the Stone* 227,840 drawings are used—each one different.

© WALT DISNEY PRODUCTIONS

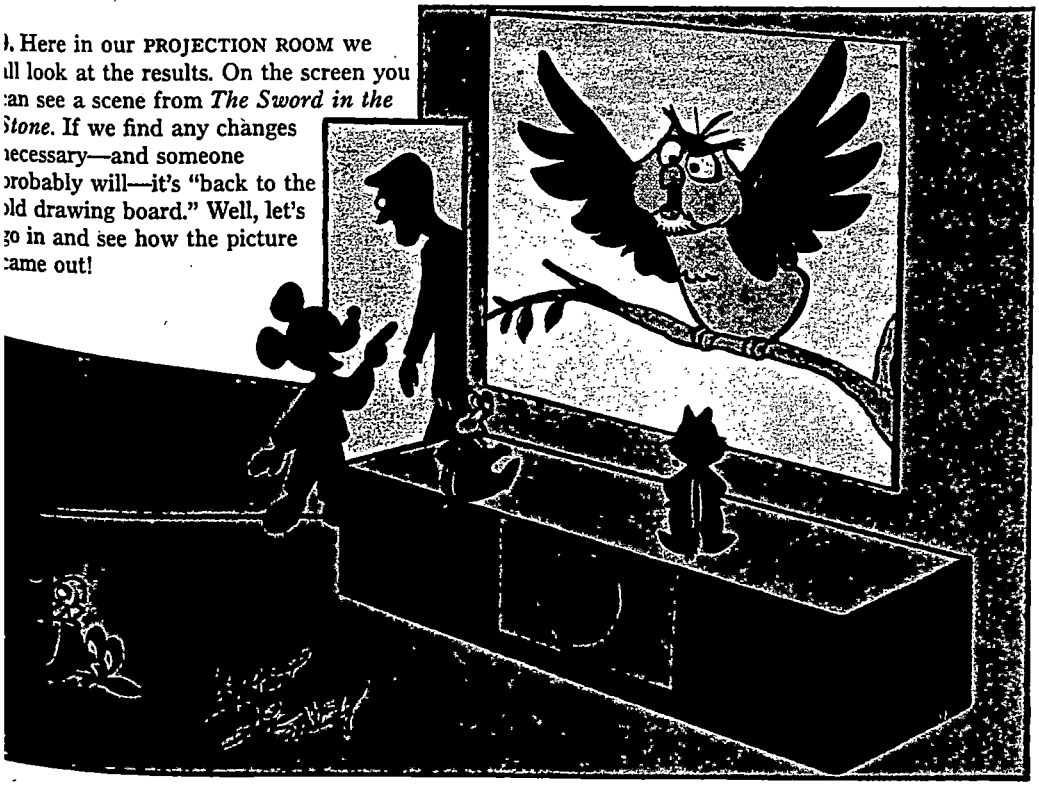




7. Ludwig von Drake, our FILM EDITOR, splices the different scenes together to make a master reel.

8. Look at this strip of film. You can see how many drawings it takes —18—for Archimedes the Owl to flap his wings just once!

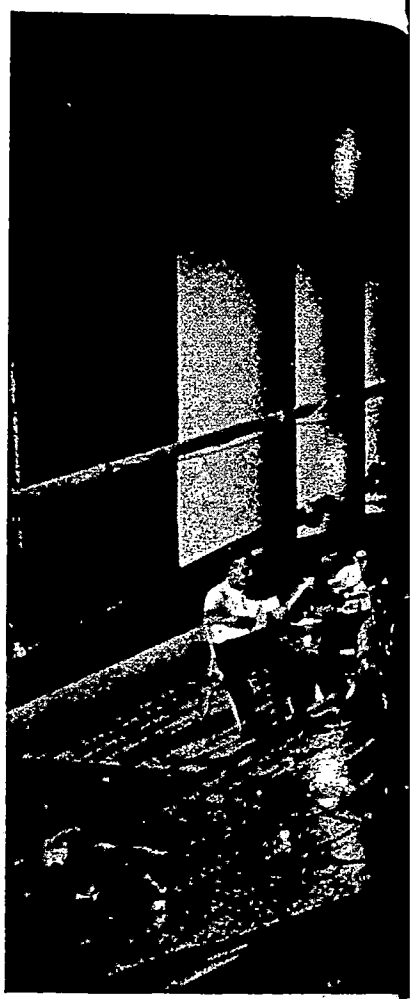
). Here in our PROJECTION ROOM we ıll look at the results. On the screen you :an see a scene from *The Sword in the Stone*. If we find any changes ıecessary—and someone ɔrobably will—it's "back to the ɔld drawing board." Well, let's ɜo in and see how the picture :ame out!



© 1962 WALT DISNEY PRODUCTIONS



Artist Sylvia Cobb draws on a sheet of celluloid. Her sketch, one of more than 200,000 drawings used in Disney's newest animated feature, *The Sword in the Stone,* will later be photographed over a painted background (below). Four years in the making, the musical comedy tells the story of how young King Arthur is tutored for his reign by Merlin the Wizard and Merlin's pet owl, Archimedes. The film, which is based on a book by T. H. White, will be released this Christmas.

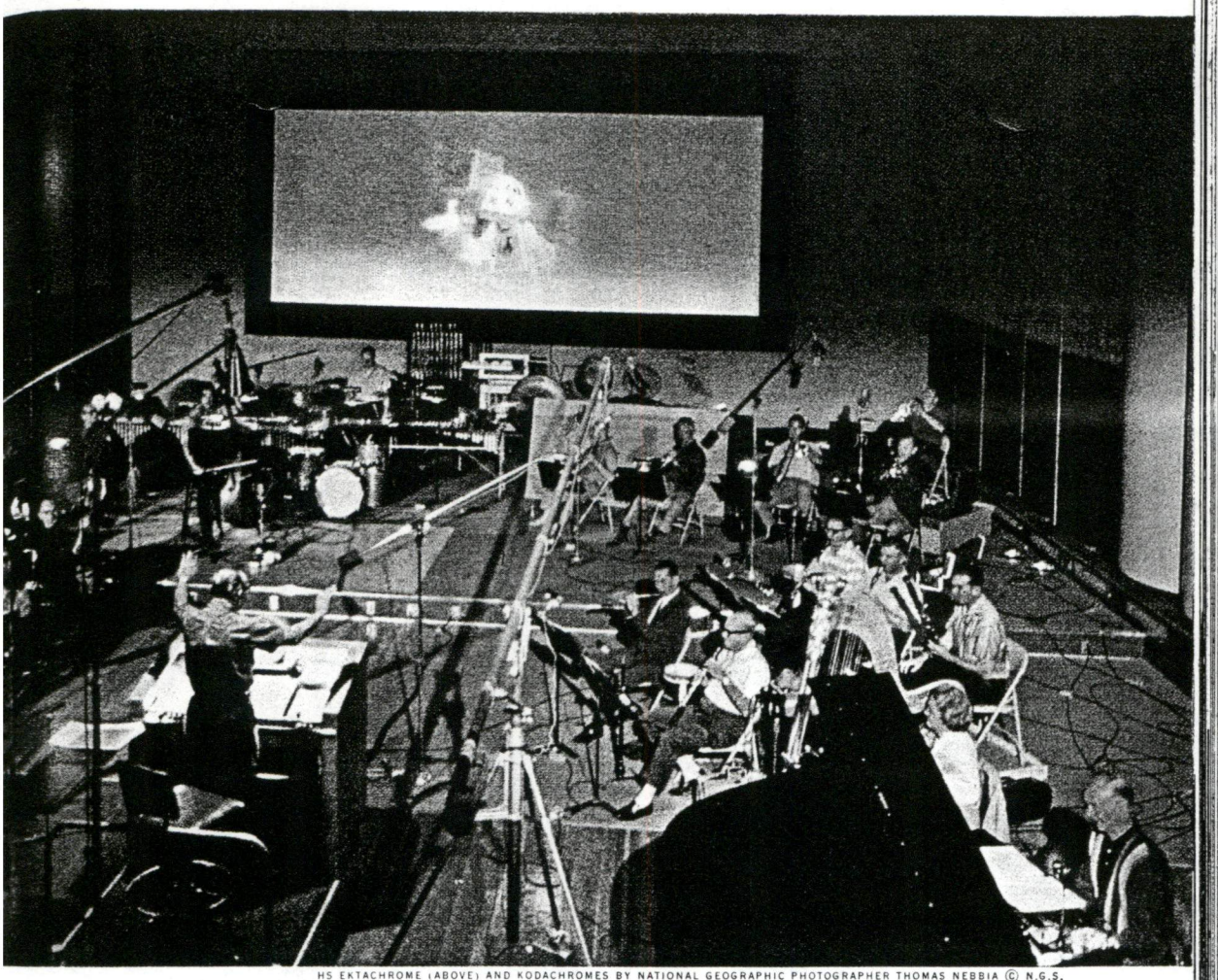


Musicians score a cartoon as Professor Ludwig von Drake prances across a sound-stage screen. Overhead microphones pick up the individual instruments and record them on three sound tracks. A later process transfers the three to a single track.

ANIMATION SCENES © WALT DISNEY PRODUCTIONS



Viselike platen holds a celluloid drawing of the long-bearded Merlin over a painted background, while an overhead camera (not shown) photographs it for a single frame of film. Each brief bit of action by a cartoon character requires hundreds of such frames. Another scene from the movie adorns the wall.



HS EKTACHROME (ABOVE) AND KODACHROMES BY NATIONAL GEOGRAPHIC PHOTOGRAPHER THOMAS NEBBIA © N.G.S.

unit as an ambulance driver, but he did not get overseas until after the Armistice (page 163). He had 11 months in France, then went to Kansas City and set up as a commercial artist. He finally landed with the Kansas City Film Ad Company in 1920, preparing animated commercials for silent-movie houses.

Walt recalls those days. "The pull toward Hollywood became strong. Animation was big there, and if I couldn't be successful at that, I wanted to be a director or a writer."

In 1923 he went off to Hollywood with $40 in hand, and for two months tried to hitch on at the studios. His $40 disappeared.

"Before I knew it, I had my animation board out," Walt recalls. He finally got an offer for twelve cartoons—Alice in Cartoonland—at $1,500 each.

"I talked my big brother Roy into going in with me," Walt told me. "I couldn't get a job, so I went into business for myself."

Business was good. Alice was followed by the successful Oswald the Rabbit series. Then came Mickey.

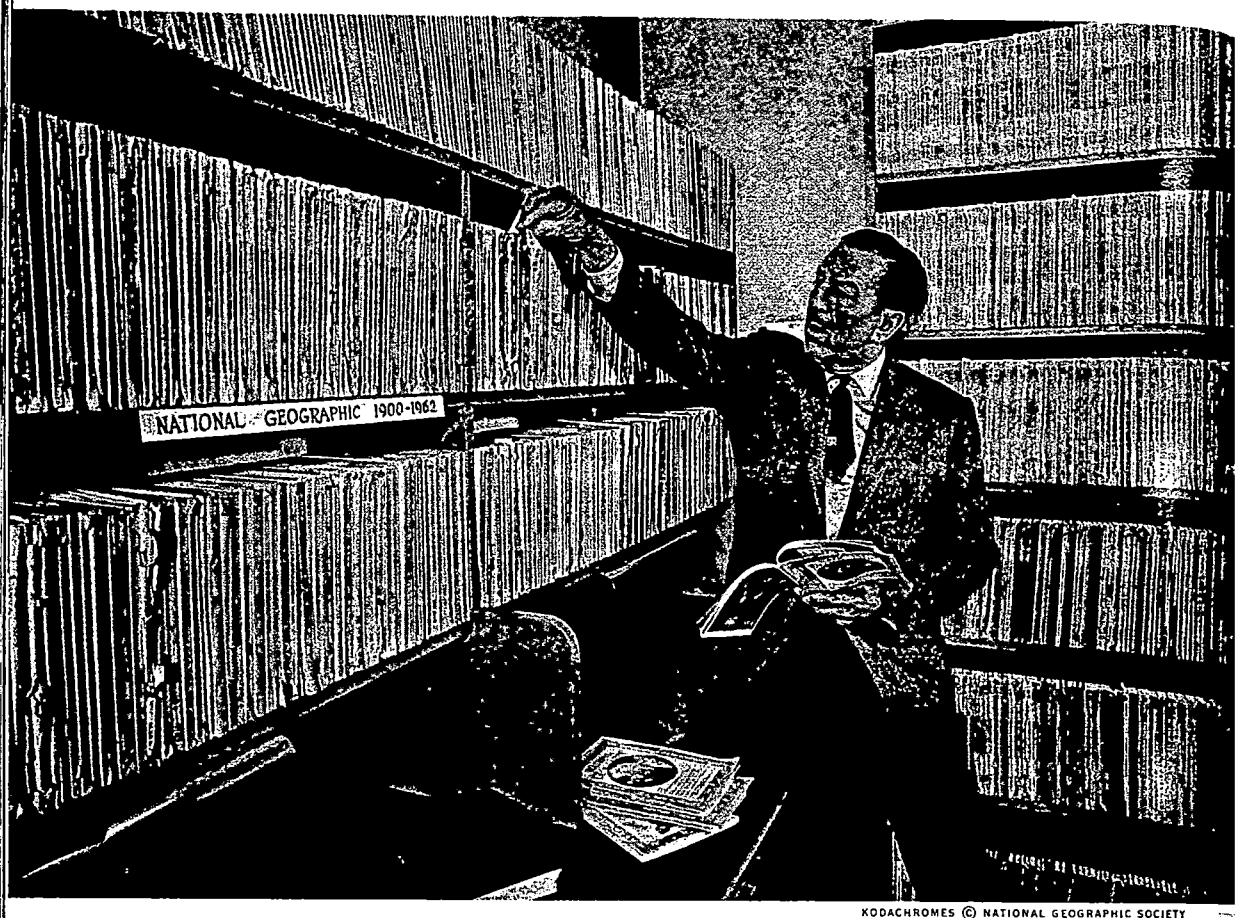
"The mouse gave us an opportunity to improve the cartoon medium," Walt says. Experiment and expansion began in 1929 with the first Silly Symphony, in which music played a key role.

Walt worked at the studio all day and every night. Only in recent years has he mastered the compulsion to work *all* the time. "I still take scripts home," he told me, "but I don't read them at night. It's a temptation to peek, but I wait until morning. I used to read at night and then worry until morning. I used to be tied up all night, but no more."

Donald Duck Becomes a Star

Walt's next enthusiasm was Technicolor's new three-color process for film. A Silly Symphony, *Flowers and Trees,* was already fully photographed in black and white. Walt decided to remake it in Technicolor. It was a gamble, since Technicolor was extraordinarily expensive.

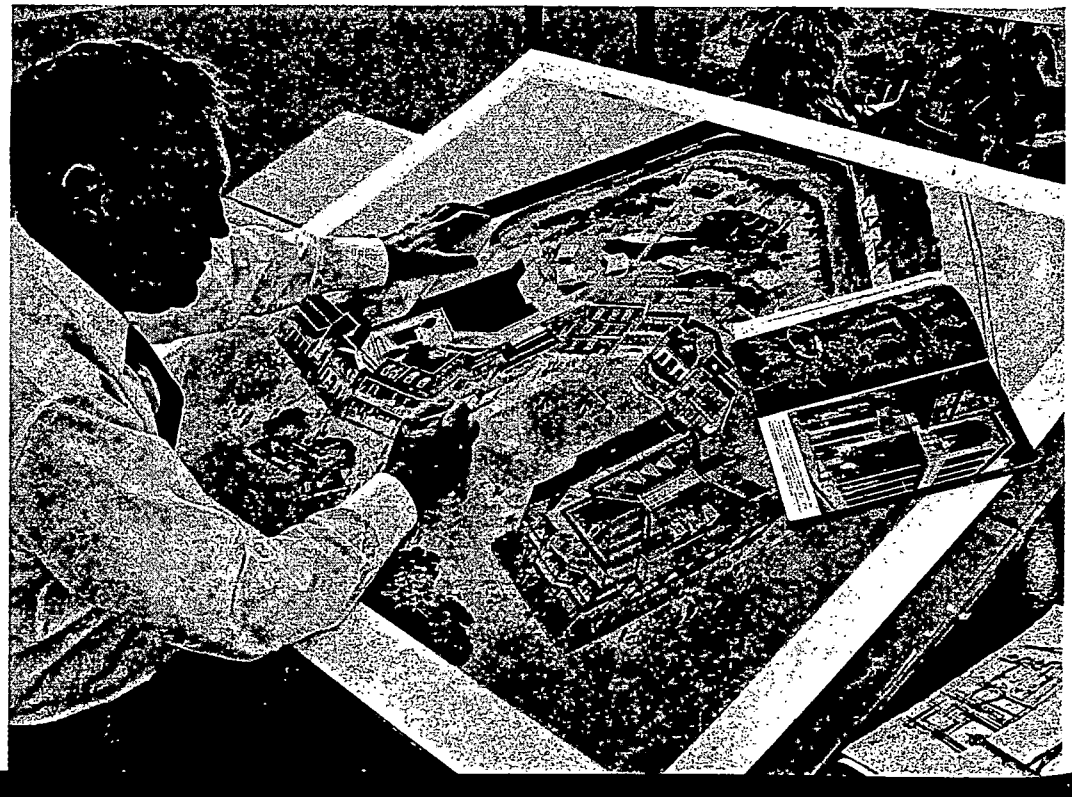
The picture was made in color and caused a revolution in the animated-cartoon indus-



KODACHROMES © NATIONAL GEOGRAPHIC SOCIETY

"A truly invaluable research tool," Disney calls the NATIONAL GEOGRAPHIC. "We use it all the time." Here he pulls out an issue in the studio library and from it gleans information on period costumes needed in a forthcoming film.

Balconied buildings of New Orleans Square, a future Disneyland attraction, will display the lacy ironwork shown in the February, 1953, GEOGRAPHIC. Art director Herbert Ryman uses the illustration to create a preliminary sketch.



try. In 1932 it became the first cartoon to win an Oscar. Some of Walt's funniest pictures were Silly Symphonies—notably *The Three Little Pigs* and *The Tortoise and the Hare.*

In 1934 Donald Duck made his first sputtering appearance in *The Wise Little Hen.* That egregious fellow became an immediate hit—and now has surpassed Mickey as the star of the stable.

"We're restricted with the mouse," Walt told me. "He's become a little idol. The duck can blow his top and commit mayhem, but if I do anything like that with the mouse, I get letters from all over the world. 'Mickey wouldn't act like that,' they say."

Scenes Gain Depth and Motion

As the pictures were ground out, the art of animation progressed. Characters were being drawn in the round and in perspective, as contrasted with the first flat figures. But Walt was never satisfied.

"I knew that locomotion was the key," he told me. "We had to learn to draw motion. Look, pull your hand across your face and you'll see what I mean. You don't see a single hand; it's sort of stretched and blurred. We had to learn the way a graceful girl walks, how her dress moves, what happens when a mouse stops or starts running."

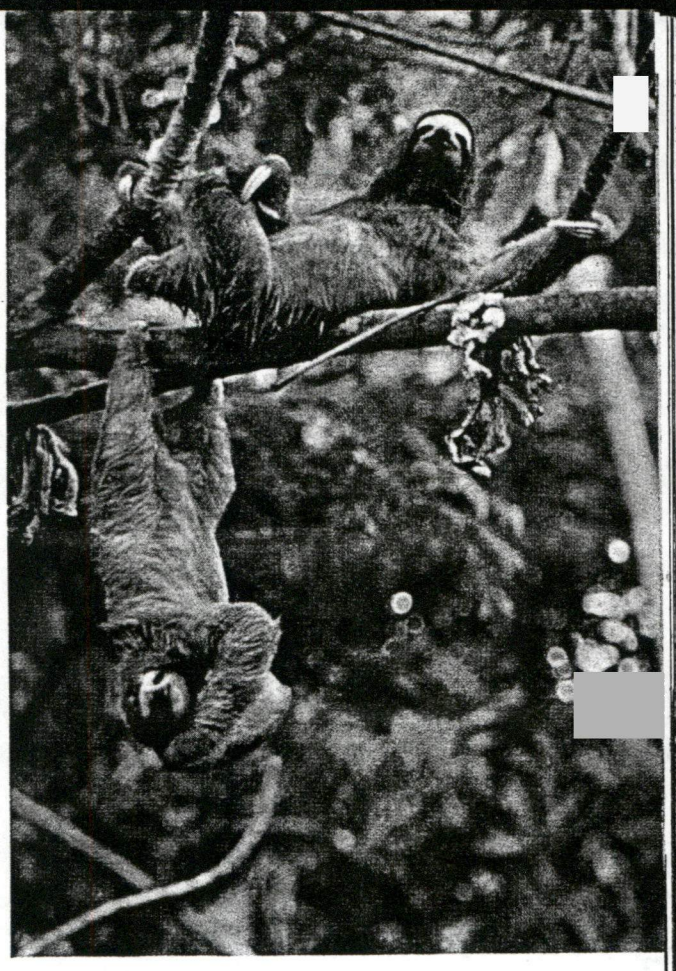
Disney set up an elaborate school for his artists. "It was costly, but I had to have the men ready for things we would eventually do."

What "we would eventually do" was *Snow White and the Seven Dwarfs,* the first feature-length cartoon. When word of this project got around Hollywood, many movie people said Disney was making his biggest mistake.

"They were thinking of the shorts—thought we were just going to string some together," Walt said. "But we had a story to tell. They couldn't get that through their heads."

While his artists were training, Walt had technicians working on a new kind of camera he planned to use for *Snow White.* He was no longer satisfied with just round figures; now he wanted the illusion of depth. To achieve this, he developed the radically different "multiplane" camera—and won an Academy Award for it.

In photographing animated films, three separate drawings are usually involved, each done on a sheet of transparent celluloid. One shows the foreground, one the animated figures, and the last the background. Before the multiplane camera, the three celluloids were simply stacked together and the camera shot through them all, giving a flat image. With



Acrobats in slow-motion, three-toed sloths of the Amazon perform for photographers in the Disney film *Jungle Cat.*

Hero of *In Beaver Valley,* one of Disney's most popular nature shorts, ventures up from beneath the ice on a winter patrol of Montana's Georgetown Lake. Moments later he narrowly eluded a starving coyote.



© WALT DISNEY PRODUCTIONS



the multiplane, more than three celluloids could be used, and they could be placed in different planes, sometimes as much as three feet apart. The camera could focus in and out among these planes to give an astonishing effect of depth and motion.

Snow White brought up a new problem. "We had to learn how to put personality into the characters," Walt told me. "Up to *Snow White,* we'd just had stock characters."

A Disney artist enlarged on the theme. "Remember in *Snow White* when the dwarfs had the pillow fight and Dopey ended up with a single feather?" he asked. "Remember how he fluffed it out and lay down with it under his head? It *was* funny, but more, it was Walt's way of expressing what kind of character Dopey is and creating audience sympathy for him."

Snow White cost one and a half million dollars, and the bankers became restive before it was completed. Walt reluctantly had to show a man from the bank the unfinished product to try to retain their confidence.

"We needed a quarter of a million dollars to finish the picture, so you can guess how I felt.

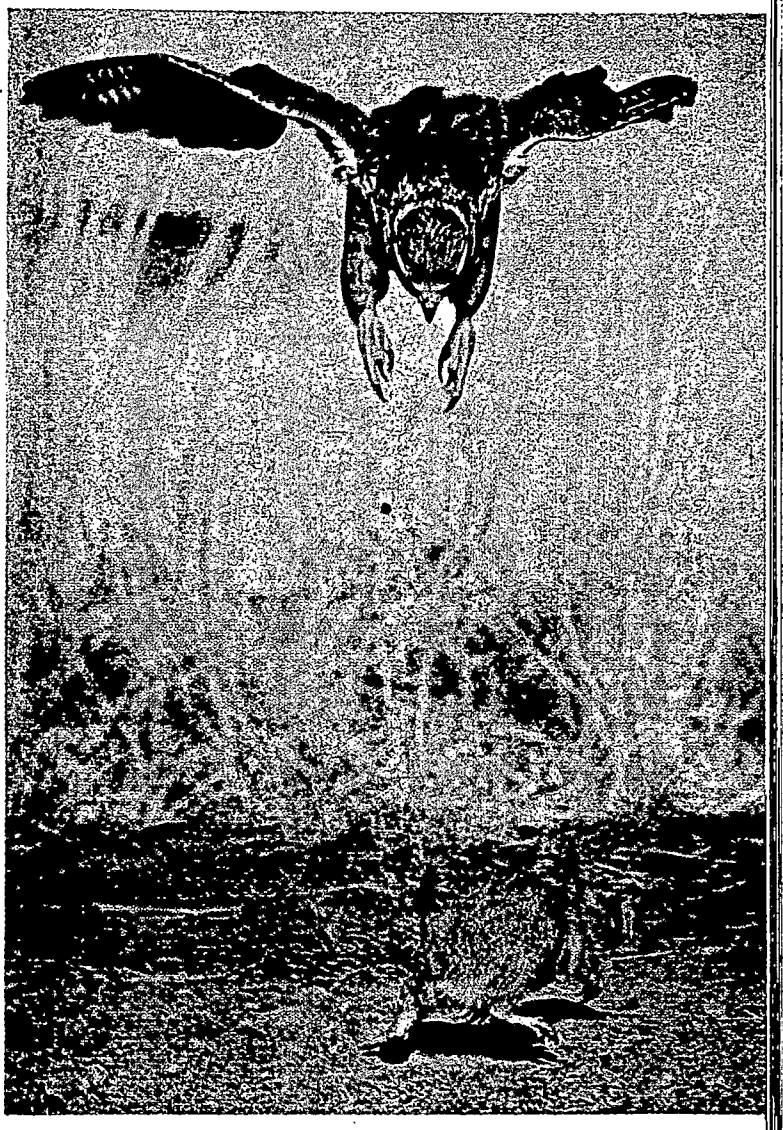
"He sat there and didn't say a word," Walt told me. "Finally the picture was over and he walked to his car, with me following him like a puppy dog. Then he said, 'Well, so long. You'll make a pot of money on that picture.' So we got the money."

Snow White and the Seven Dwarfs (page 165) went on to make theatrical history and brought many honors to Disney. In 1938 Yale gave him an honorary master of arts. In presenting him as a candidate for the degree, Professor William Lyon Phelps said:

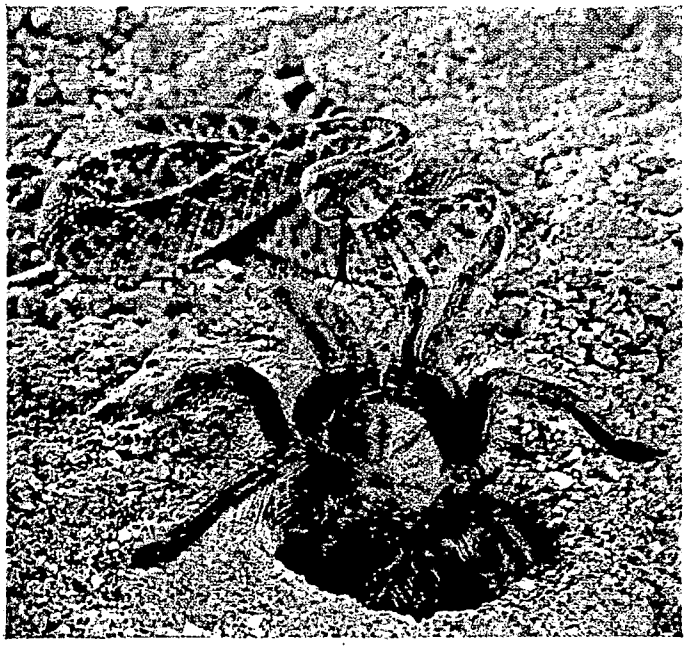
"One touch of nature makes the whole



© WALT DISNEY PRODUCTIONS



Lord of the Amazon, a jaguar proves as agile in the treetops as on the ground. Photographers armed only with cameras recorded the beast's life cycle in *Jungle Cat.*



Dive-bombing falcon swoops down on a prairie dog in *The Vanishing Prairie,* filmed in South Dakota, Wyoming, and Montana. Racing for its tunnel, the rodent barely escapes the bird's needlelike talons.

Tarantula and rattlesnake square off in a scene from *The Living Desert.* The battle—rarely seen, much less photographed—ended in a draw. Patience is a requisite for Disney nature cameramen; one team waited six weeks for an alligator's egg to hatch.

world kin, and Walter Disney has charmed millions of people in every part of the earth. . . . He has endeared America to the hearts of foreigners."

That same year brought honorary degrees from Harvard and the University of Southern California. (In 1960 Walt received an honorary diploma from the Marceline, Missouri, high school, which was pleasant, since he had never finished high school.)

After *Snow White* came other feature-length cartoons: *Pinocchio, Fantasia,* and *Bambi. Fantasia,* released in 1940, started out to be a kind of super Silly Symphony for Mickey Mouse, with Leopold Stokowski directing a full orchestra in *The Sorcerer's Apprentice.* Walt built it into something more, a brilliant combination of animation and fine music—from Beethoven's *Pastoral Symphony* to Stravinsky's *Rite of Spring. Fantasia* introduced stereophonic sound 15 years before it was generally used in motion pictures.

Bambi Points Way to Nature Films

Bambi was the fictionalized story of a deer, and the animal studies it involved made it the forerunner of one of Disney's most important contributions: the True-Life Adventure films, about live animals in nature.

"One thing always leads to another around here," Walt told me. "In *Snow White,* we had cute little animals, more on the fantasy side. In *Bambi* we had to get closer to nature. So we had to train our artists in animal locomotion and anatomy."

Walt introduced live animals into the studio, deer and rabbits and skunks. "But they were no good," he says. "They were just pets. So we sent the artists out to zoos, and all we got were animals in captivity. Finally, I sent out some naturalist-cameramen to photograph the animals in their natural environment.

"We captured a lot of interesting things and I said, 'Gee, if we really give these boys a chance, I might get something unique!' "

But the war intervened: Walt Disney Productions became virtually a war plant for the duration. Disney training films for the Army and Navy, pictures for bond drives, and similar projects made an important contribution to our war effort.

As one of his first postwar projects, Walt sent Alfred Milotte and his wife Elma to Alaska. They sent back miles of film. In the footage—or mileage—Walt stumbled on one of the great stories of nature: the saga of the fur seals coming up from the sea to crowded island beaches in the Pribilofs, there to calve and mate.

The Milottes caught the cruel and mysterious reality of the fur seal—the courting and mating, the fury of the bulls defending their harems against bachelor seals, with babies being trampled and crushed in the turmoil. And, in the end, the eerie disappearance of the herds into the sea.*

The picture was *Seal Island.* It won an Oscar as 1948's best two-reel subject.

This success was followed by another, *In Beaver Valley.* Walt will go to the nth degree to get perfection, and for this film he kept cameraman-naturalist Milotte in the wilds for more than a year, studying the beaver's life habits as he photographed. Out of Milotte's footage came the story of a talented, fascinating animal (page 175).

The True-Life Adventure pictures used techniques learned in cartoons.

"Any time we saw an animal doing something with style or personality—say a bear scratching its back—we were quick to capitalize on it," says a Disney writer. "Or otters sliding down a riverbank—humorous details to build personality.

"This anthropomorphism is resented by some people—they say we are putting people into animal suits. But we've always tried to stay within the framework of the real scene. Bears *do* scratch their backs and otters *are* playful."

Old Indian Trick Still Works

The cameramen spent months in primitive areas, in African heat, in Alaskan blizzards, in South American jungles. A film by Murl Deusing for a National Geographic Society lecture formed the basis of many important sequences in *Nature's Half Acre,* and many of the Society's lecturers over the years have contributed footage to Disney nature films.

Disney's cameramen-naturalists worked with telescopic lenses, zoom lenses, time-lapse cameras, and underwater cameras; from behind elaborate blinds, high in the treetops, and from fixed platforms.

Tom McHugh, photographing a buffalo herd for *The Vanishing Prairie,* found he could not get close enough, even with a telescopic

(Continued on page 183)

*See "The Fur Seal Herd Comes of Age," by Victor B. Scheffer and Karl W. Kenyon, NATIONAL GEOGRAPHIC, April, 1952.

Toy Model T Flies in *Son of Flubber*

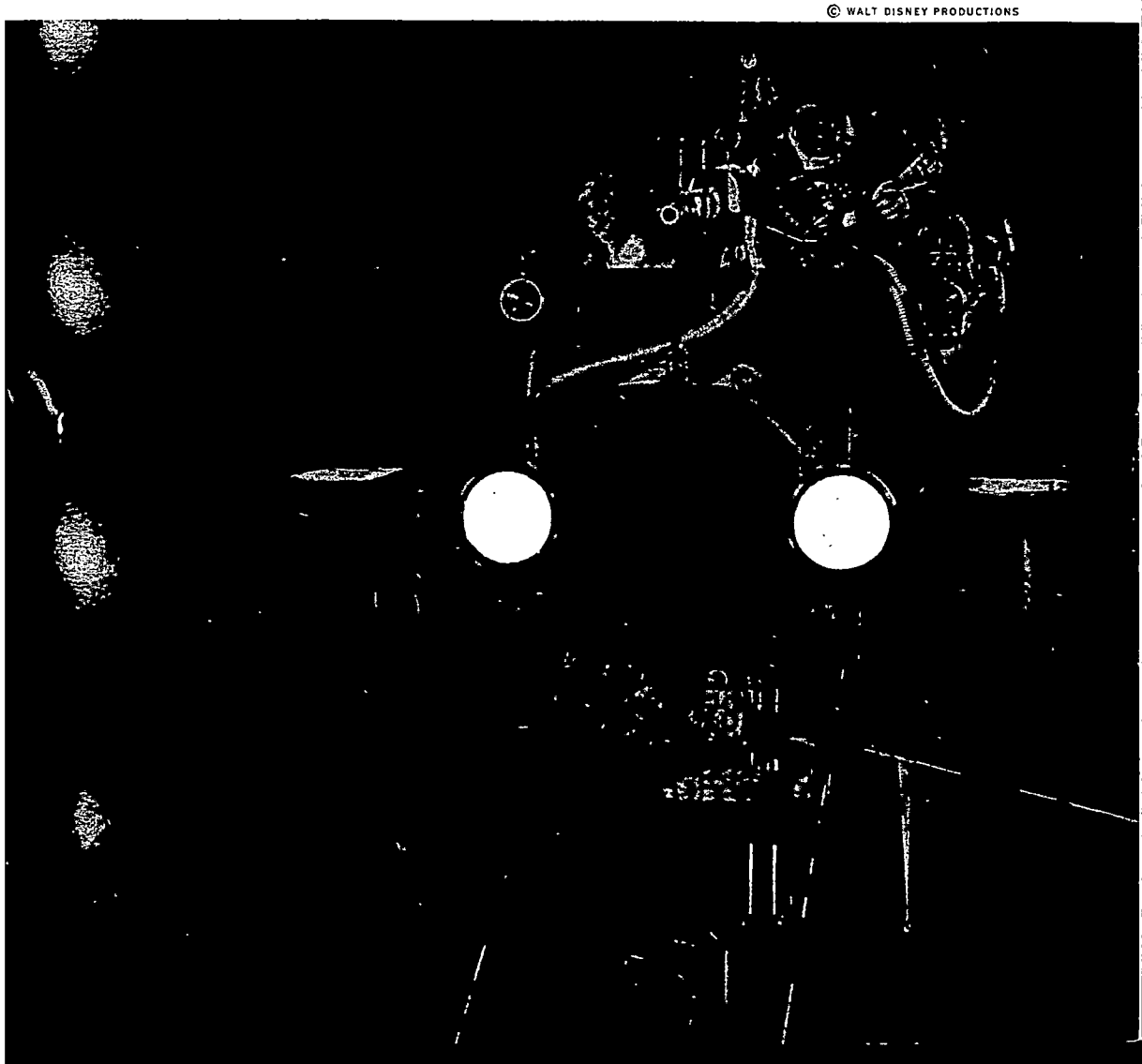
Miniature car, flown by remote control, appears only in long-distance shots. Plastic figures resemble actors Fred MacMurray and Tommy Kirk. Technician Bob Mattey prepares the vehicle for the cameras.

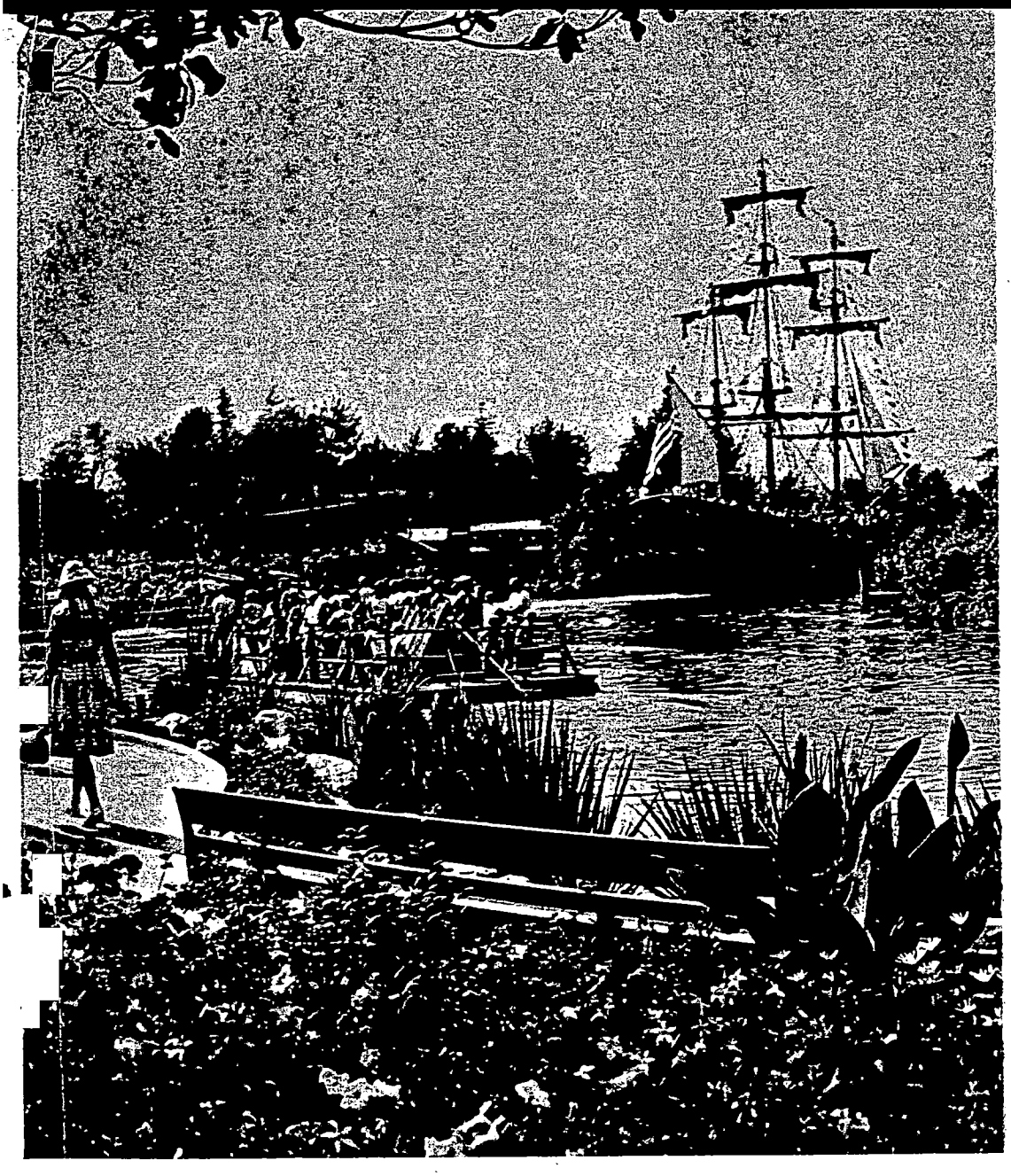


Full-size Model T poses for close-ups with MacMurray and his dog. Mounted on a hydraulic ram, it moves up or down, revolves 360°, tips in any direction. Shot against a special red screen, the action can be combined with any background.

KODACHROME BY THOMAS NEBBIA © N.G.S.

© WALT DISNEY PRODUCTIONS





Windjammer and Stern-wheeler Circle Tom Sawyer Island in Frontierland

Youngsters seeking excitement find it on the tree-clad island: They can angle for real fish in Catfish Cove, bounce across a gorge on a suspension bridge, peer down into the bottomless pit in Injun Joe's Cave, climb into Tom and Huck's Tree House, and explore Fort Wilderness. Log raft at left foreground ferries visitors to and from the island.

Flower-banked paths rim the Rivers of America. Botanically, it is always spring or summer in Disneyland. A staff of 30 gardeners tends some 700 species of trees, shrubs, and flowering plants as well as half a million annual and perennial blooms.

lens. Then he remembered an Indian trick. He covered himself with a buffalo skin and sneaked in for close-ups.

James Algar, the writer and director of *The Vanishing Prairie,* recalls being surrounded by the torrential rush of buffalo.

"I'd always heard of the thundering herd, and the herd thundered all right. But what I had never heard of was the sibilant, silken swish which accompanies the stampeding buffalo. It was even more terrifying than the thunder."

Alfred and Elma Milotte spent almost three years in Africa photographing *The African Lion.* One of their no-

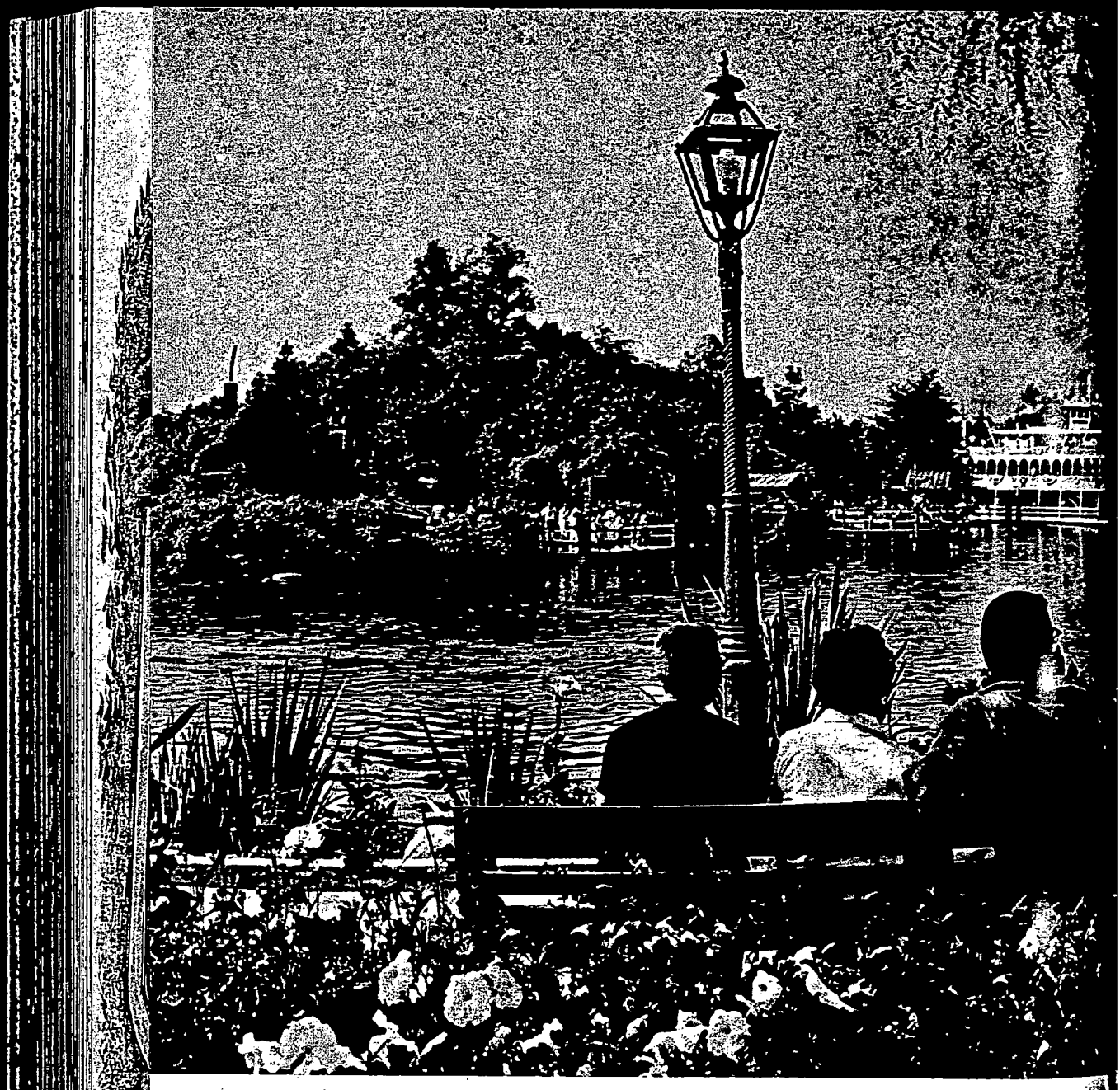


table sequences shows a rhinoceros bogged in a water hole, helpless and raging. The exertions and grunts of the doomed rhino attracted an audience of jungle creatures. Birds added their raucous cries. Antelope watched. An elephant surveyed the scene, panicked, and ran away. A baboon sat on the bank thoughtfully, as though trying to contrive some plan that would be of help.

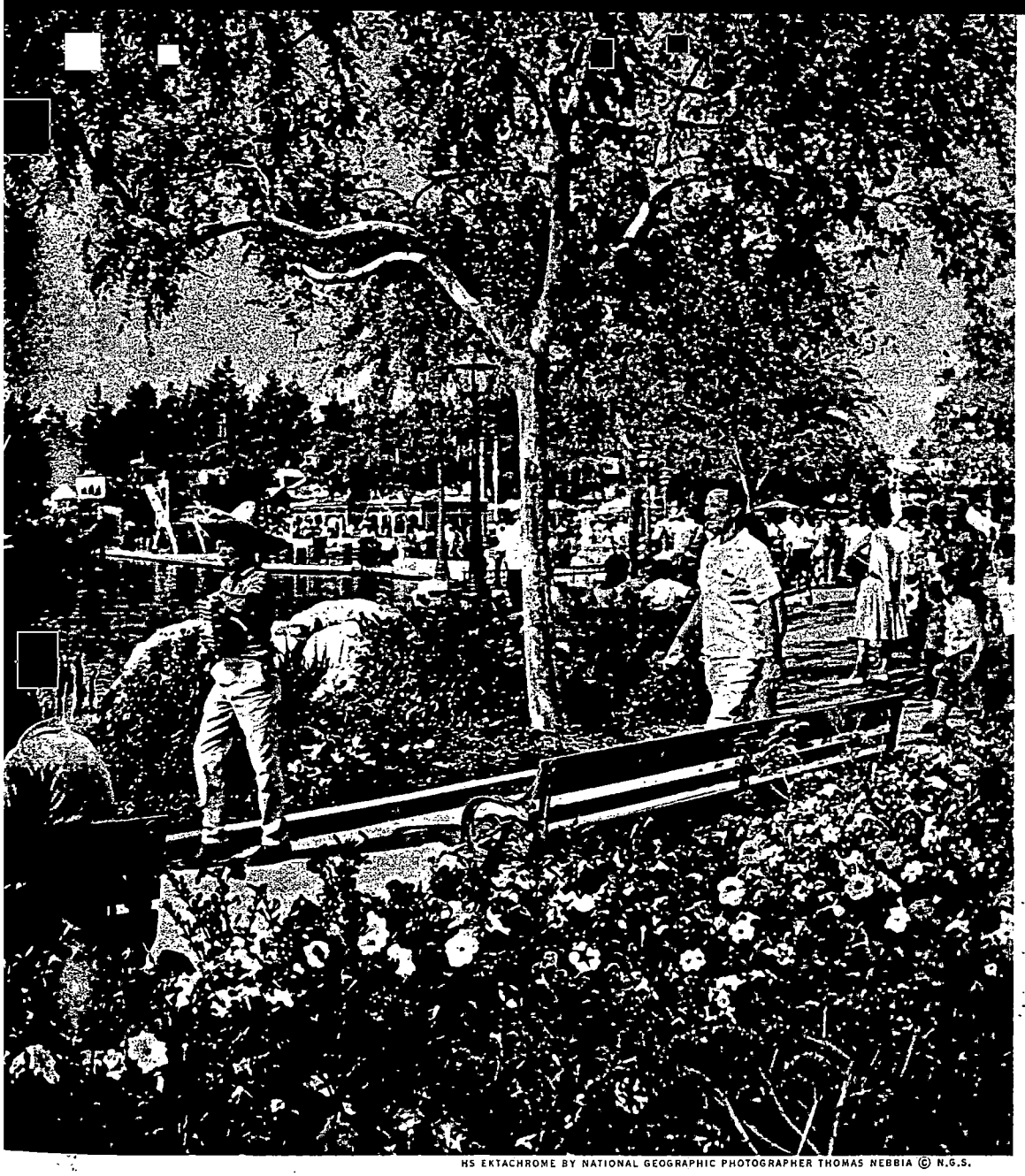
Enraged Rhino Charges Benefactors

In the film the rhino was left to die. Actually, the Milottes decided to rescue him. Dodging the desperate animal, they got a stout rope under his head and rump, tied the line to a truck, and pulled him free.

The rhino was ungrateful. Once on dry land, he charged the truck, and they barely managed to get away.

The Milottes brought back much distinguished footage. They recorded a leopard lurking in a thorn tree above a herd of wildebeests, showed him drop on a calf and drag it back into the tree for his meal. They also filmed the kill of an antelope by a lion.

Other outstanding film records were produced by Disney's naturalist-photographers: a bobcat in hot pursuit of a marten; the private lives, births, mating, and the search for food of the pine squirrel, golden eagle, raccoon, and crow; a goshawk striking a flying squirrel in mid-air.



HS EKTACHROME BY NATIONAL GEOGRAPHIC PHOTOGRAPHER THOMAS NEBBIA © N.G.S.

They also recorded a goshawk slamming into photographer Paul Kenworthy's shoulder as he worked high in a tree to film close-ups of its young.

As the technique improved, the photographers worked in compounds—sometimes as big as 50 acres. "It was a short cut," a writer told me. "We're not faking nature. We gave the animals the opportunity to appear before the camera.

"Take the spectacular shot of the screaming bobcat scrambling to the top of a saguaro in *The Living Desert*. It may have been taken in a compound—but it wasn't faked. The cat streaked up that cactus because he was frightened by wild pigs.

"When we follow the animals underground, we of course expose their tunnels. In *Perri*, the squirrel goes underground. We spent days conditioning her to the bright lights needed for color photography. Then, when we came to shoot, she didn't pay any attention to us. We wondered if she had needed conditioning at all."

"Our naturalist-photographers probably wound up knowing as much about animals they photographed as anyone around—including the scientists," Walt said. "I don't think there's an animal on the North American Continent we don't have coverage on."

Merely documenting the lives of wild creatures was not enough. The cameramen's foot-

age contained drama, but it took the dramatist's hand to make it coherent.

A fascinating fragment of one of Walt Disney's critiques taken down during a screening of *The Living Desert* survives and shows him at work:

"In sequence where tortoises are courting, Walt said: They look like knights in armor, old knights in battle. Give the audience a music cue, a tongue-in-cheek fanfare. The winner will claim his lady fair....

"*Pepsis* wasp and tarantula sequence: Our heavy is the tarantula. Odd that the wasp is decreed by nature to conquer the tarantula. When her time comes to lay eggs, she must go out and find a tarantula. Not strength, but skill helps her beat Mr. Tarantula....

"Then the hawk and the snake. Our other heavy is the snake.... With wasp and tarantula it's a ballet—or more like a couple of wrestlers. The hawk should follow. Tarantula gets his and then Mr. Snake gets his.... *Pepsis* wasp doesn't use brute strength, but science and skill. Should be ballet music. Hawk uses force and violence. One could follow the other and have a different musical theme as contrast."

Nature Documentaries With a Plot

Walt has an amazing capacity to dramatize his work. When he is in a story conference, he takes the parts himself. Before *Snow White* he gave a four-hour performance of the entire picture, taking all the parts from Snow White to the smallest rabbit.

"That one performance lasted us three years," an animator told me. "Whenever we'd get stuck, we'd remember how Walt did it that night."

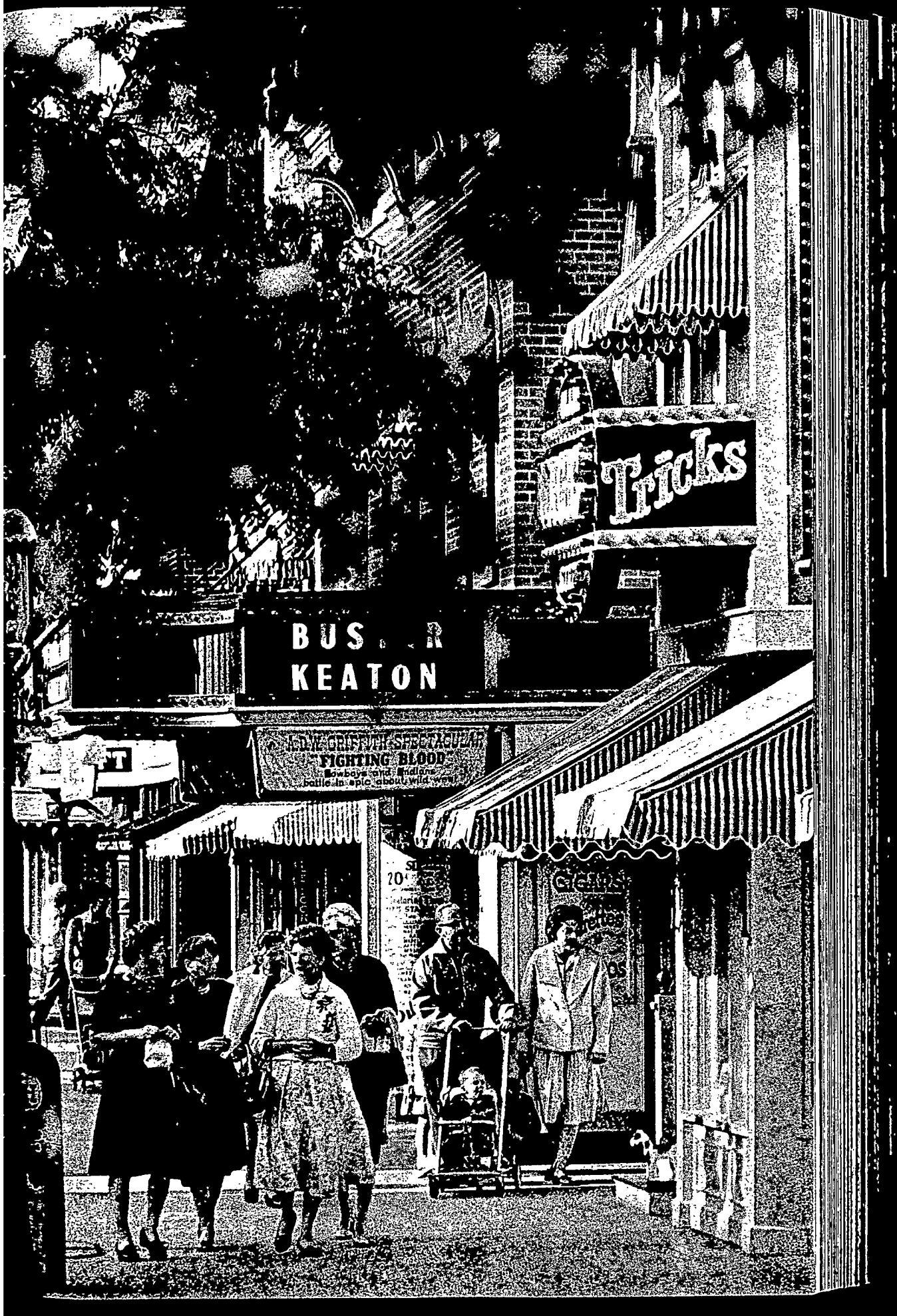
Next Walt Disney laid plans for a new kind of animal picture. "We decided to combine nature's truth with fiction," Walt told me.

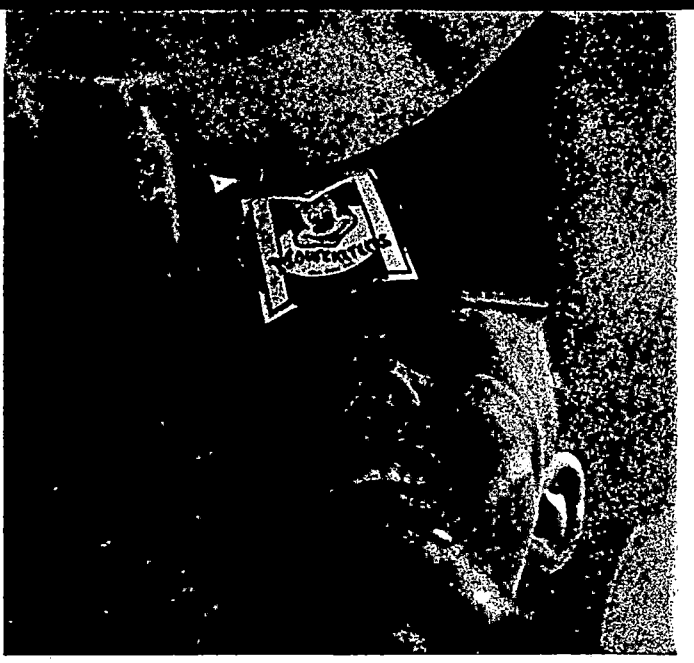


KODACHROMES (c) NATIONAL GEOGRAPHIC SOCIETY

Disney's supersecret hideaway, an apartment above the firehouse in Disneyland, has never before been photographed. Furnishings of the early 1900's match the mood of Main Street (opposite). Grandchildren play under the eye of Mrs. Walt Disney as grandfather telephones.

Gas lamps light an old-time street lined by movie theater, tobacconist, apothecary shop, ice-cream parlor, and penny arcade and candy store—each building scaled to 65 percent true size. Visitors see mustachioed policemen in thimble hats strolling the sidewalks as horse-drawn trolleys jingle past.


Tricks
BUS R
KEATON
FIGHTING BLOOD



Sprouting mouse ears testify that this young Disneylander is a Mouseketeer, a fan of Mickey's.

"**Up above the world you fly,** like a teatray in the sky," recited the Mad Hatter in the story of *Alice in Wonderland.* Riding aluminum gondolas attached to overhead cables, Skyway passengers heed the Hatter as they soar over the scenic canals of Storybook Land where the Pirate Ship anchors, its Jolly Roger fluttering from the top mast. The aerial link between Fantasyland and Tomorrowland, first of its kind in the United States, cuts through the heart of the Matterhorn (pages 194-5).

"We would use the documentary material straight from nature, but give it a plot."

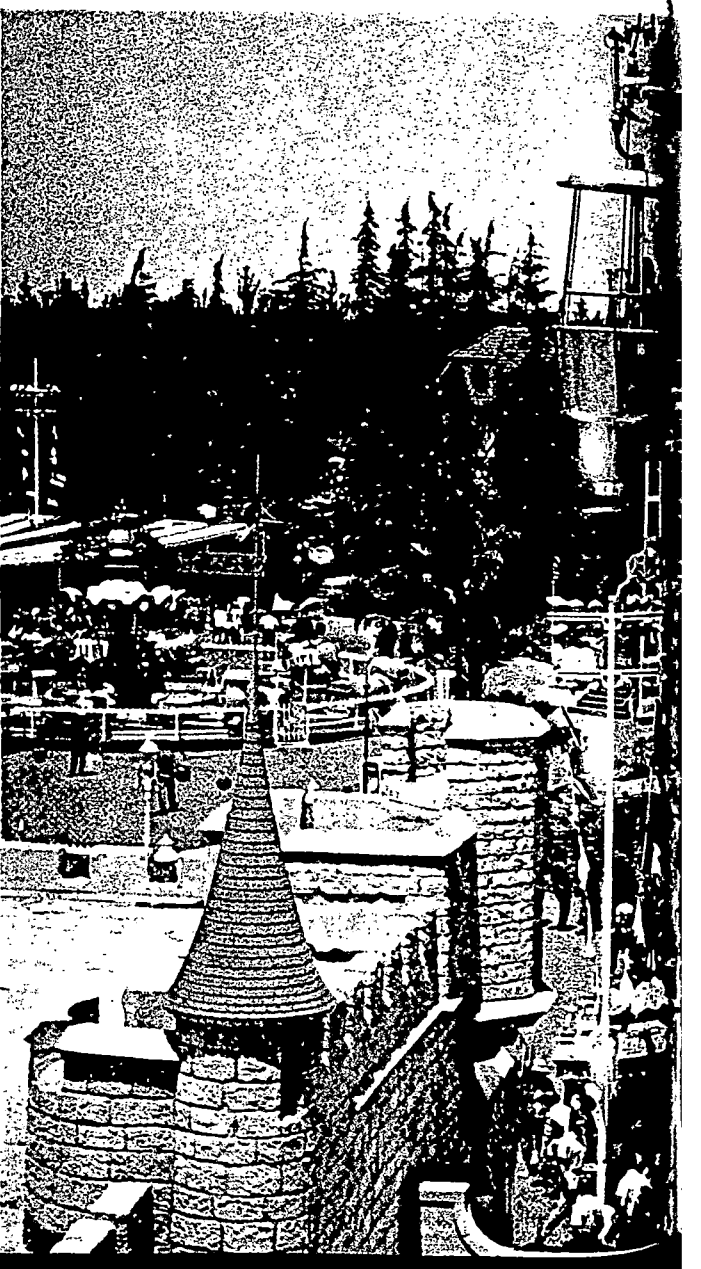
Perri, the story of a squirrel, by Felix Salten, who also wrote *Bambi,* was the first of these. Naturalist-photographers spent three and a half years in the Uinta Mountains of Utah, filming the life cycle of every animal in the cast. They sent back more than 200 miles of film!

"Just viewing their films took weeks," Winston Hibler, the co-producer, told me. "Then it took painstaking editing to fit the film to the story. And by adding music and animation, we produced a paradox—a true-life fantasy."

Perri was followed by a continuing series of similar pictures that tell stories about animals in relation to man.

"The animals have names and we kind of pull for them," a writer told me. "Stories are believable as long as the audience knows the things actually happened. We have to contrive to get the animals to do what the plot calls for without their appearing to be trained animals. But we aren't asking them to talk.

"In *The Legend of Lobo,* for example, the script called for the main character, the wolf, to walk a narrow log spanning a deep chasm. This was achieved by training the wolf, first to walk across a log near the ground, then to continue to cross the log as it was raised higher and higher.



"When the picture was shot, the wolf actually crossed a log about 75 feet long spanning a chasm several hundred feet deep."

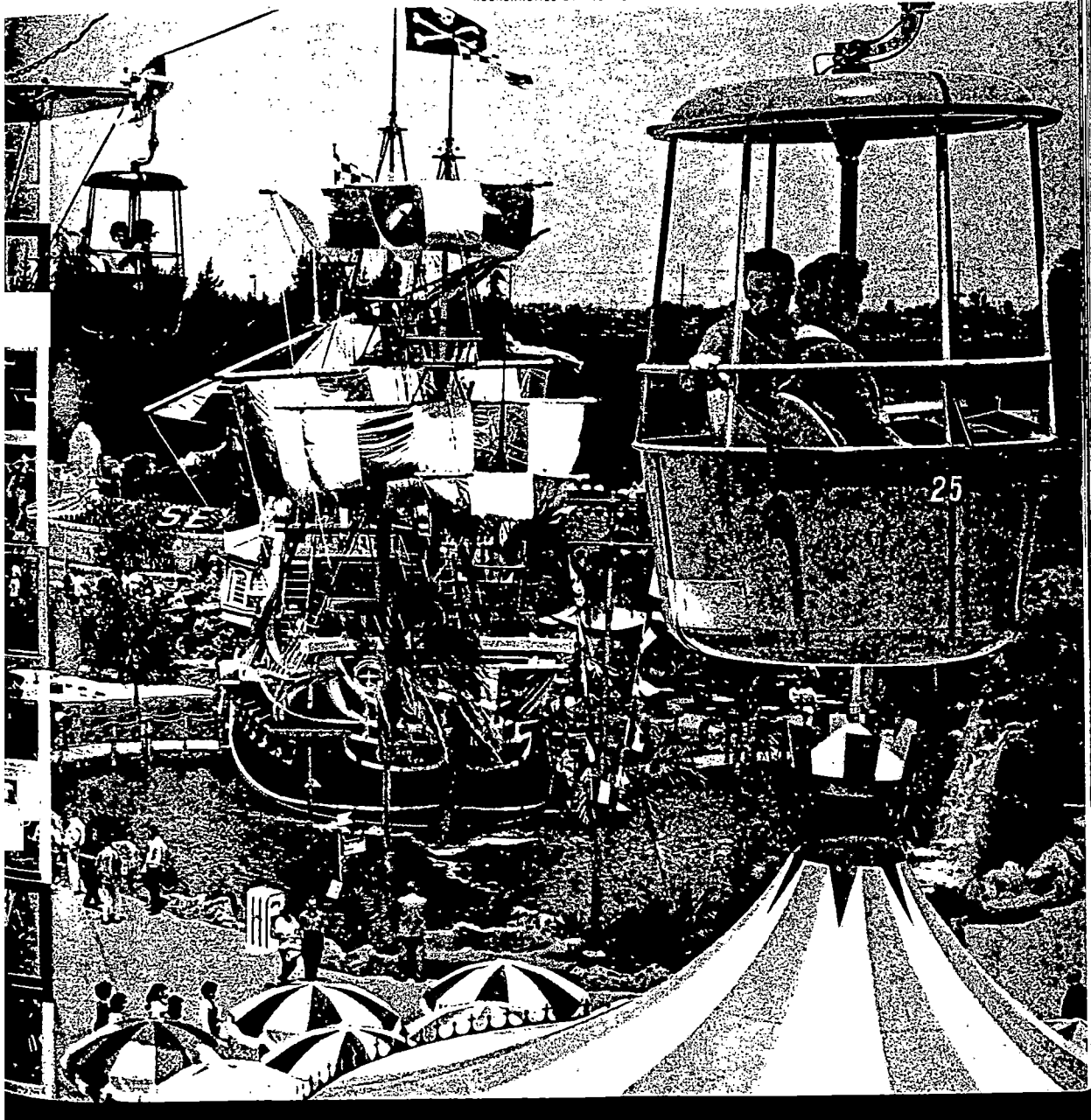
From animal pictures Walt Disney has gone on to live-action pictures about people on an astounding variety of subjects.

Disney stuck to timeless pictures at first: *Treasure Island, Robin Hood,* and *Davy Crockett*—films which can be released many times. "Then I got to thinking, 'When it comes to making comedy, we're the ones'; so we did *The Shaggy Dog.* So far it's been seen by 55 million people." The live-action comedies closely follow the Disney cartoon techniques. "We've always made things fly and defy gravity," Walt told me. "Now we've just gone on to flying flivvers, floating football players, and bouncing basketball players."

The geographic scope and variety of the Disney activities are awesome. Besides a company in the Burbank studio filming a new movie called *Summer Magic,* Walt had camera crews in Florida, Yellowstone Park, and New England, a complete production unit in Canada for *The Incredible Journey,* a production unit in Majorca and another in Vienna, a feature cartoon in the works, plus four television cartoons, and a Western being shot at the studio ranch.

I had been told that Walt makes all major decisions on all his pictures, and I wondered how he kept track of things.

KODACHROMES BY THOMAS NEBBIA (LEFT) AND MELVILLE BELL GROSVENOR (C) N.G.S.



I found out when I sat in with him as the "dailies"—excerpts from various pictures—were projected. About fifteen of the staff—musicians, directors, song writers, producers, and writers—came in.

We listened to Burl Ives sing "The Ugly Bug Ball" a dozen times as the camera covered him from different angles. Sad Sam, the original shaggy dog, appeared on the screen with a caterpillar on his nose. We saw a scene from a Western played over and over from different points of view. The dogs in *The Incredible Journey* went through their paces.

Disney himself, in full color, flashed on the screen in a lead-in for his television program, *The Wonderful World of Color*. He began suavely and then blew his lines.

"I'm not only getting wrinkles," he said from the back of the room, "I'm losing my eyesight, too." He told a cameraman, "Don't use that diffusion on me. I look out of focus. Let the wrinkles show."

We were in the projection room two hours. This, I learned, was how Disney keeps on top of his many projects. His men send their product to be appraised. A shipment of film from Europe arrives every Tuesday. Walt also makes frequent trips to Europe and flies key personnel to the studio for conferences. He is not a memo-writing man.

"After we tie down the shooting script, it's up to the boys to make the pictures," Disney told me. "If they run into trouble, I always tell them, 'If you bring me a problem, have a solution.' Lots of times, their solution is the answer and it's just a matter of saying O.K."

Magazine a Friend to Researchers

On one of my first trips around the studio, I saw the NATIONAL GEOGRAPHIC almost everywhere I went: in the animators' offices, in the machine shop, on writers' desks. I saw it in the wardrobe department, where it's used in designing the correct clothing for various



countries, and in the staff shop at Disneyland, where the realistic animals are cast for Adventureland.

"Looks like I planted them," Walt said, "but we really use the GEOGRAPHIC. We couldn't be in business without it" (page 174).

When I dropped into the library to inquire about the meticulous research that backs up every Disney picture, Koneta Roxby, the chief of research, told me: "The GEOGRAPHIC is one of our basic research sources. We use it almost every day.

"We certainly used it when Disneyland was being built," she went on. "This library was a madhouse. There would be ten or fifteen people waiting in line for research materials and, of course, the phone rang every minute."

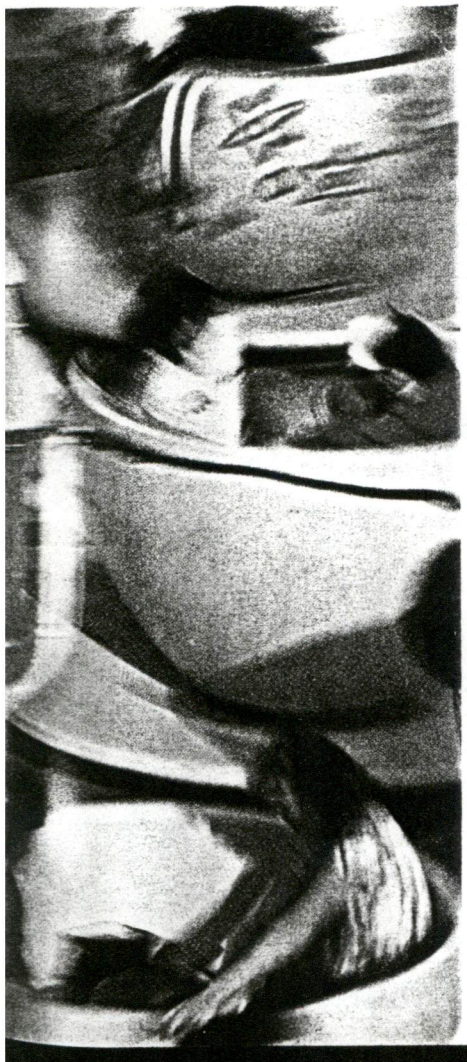
Disneyland really started more than 20 years ago, when Walt got the idea for an amusement park that grownups as well as children would enjoy.

"I had all my drawing things laid out at home, and I'd work on plans for the park, as a hobby, at night."

At the time, amusement parks were dying all over the country. "I talked Disneyland, but no one could see it," Walt recalled. "So I went ahead and spent my own money."

In 1954, for the site of his kingdom, Walt bought 244 acres of land—mostly orange groves—25 miles from Los Angeles, near

Shrieks of joy resound as riders twirl like tops at the Mad Hatter's Tea Party (below), splash through a glacial lake at the foot of the Matterhorn (right), and bounce in air-cushion cars known as Flying Saucers (lower right).





KODACHROMES BY THOMAS NEBBIA © NATIONAL GEOGRAPHIC SOCIETY



Anaheim, California. "I wanted flat land that I could shape," he said.

He surrounded the entire park with a high earth embankment. "I don't want the public to see the real world they live in while they're in the park. I want them to feel they are in another world."

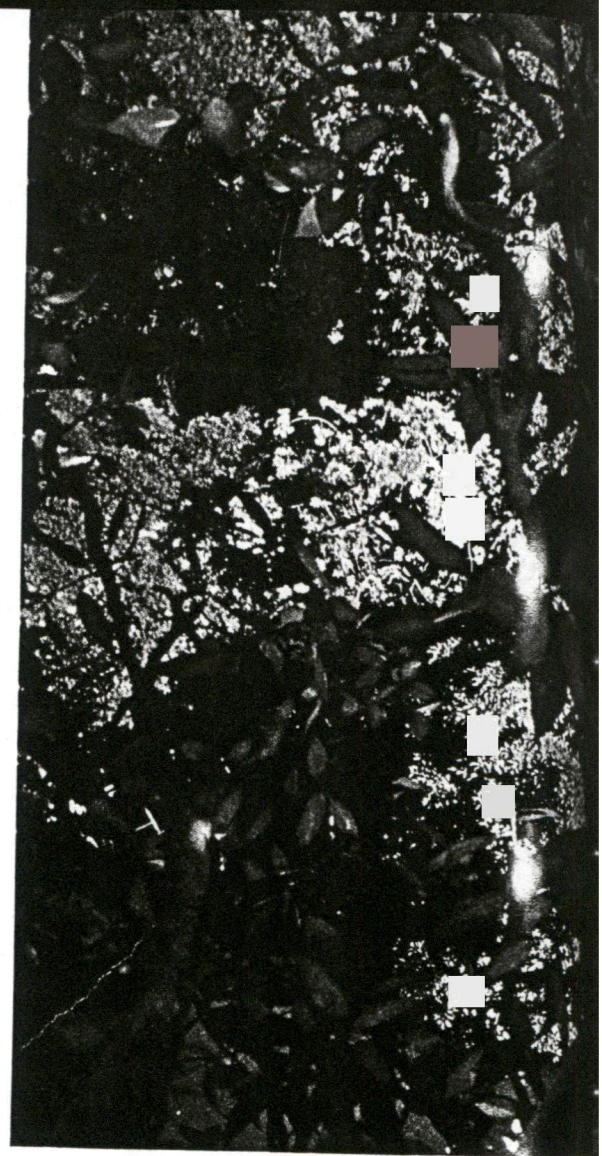
When the preliminary plans for the park were completed, the cost estimate was $4,700,000, but Joe Fowler, who is in charge of Disneyland, says, "That was only a guess." The over-all cost to date is approximately forty-four million dollars!

Disneyland: the Geography of Imagination

At the Disneyland opening, in July, 1955, a year after the first orange tree was uprooted, Walt said, "Disneyland will never be completed. It will grow as long as there is imagination left in the world." It seemed, at the time, a pleasant sentiment, but few took it literally. Walt did, and that is why Disneyland remains unique; he is forever enlarging it (painting, pages 180-82). Now he is building an old New Orleans Square, complete with a bayou boat ride.

Disneyland, on a fall day, is full of warmth and zest. I paid my respects to the giant portrait of Mickey Mouse, in living flowers, that adorns the slanting earth embankment at the park's main entrance.

I stepped into the Town Square—and right into Walt Disney's childhood: The Square with its red-brick Victorian elegances is a







KODACHROMES BY NATIONAL GEOGRAPHIC PHOTOGRAPHER THOMAS NEBBIA © N.G.S.

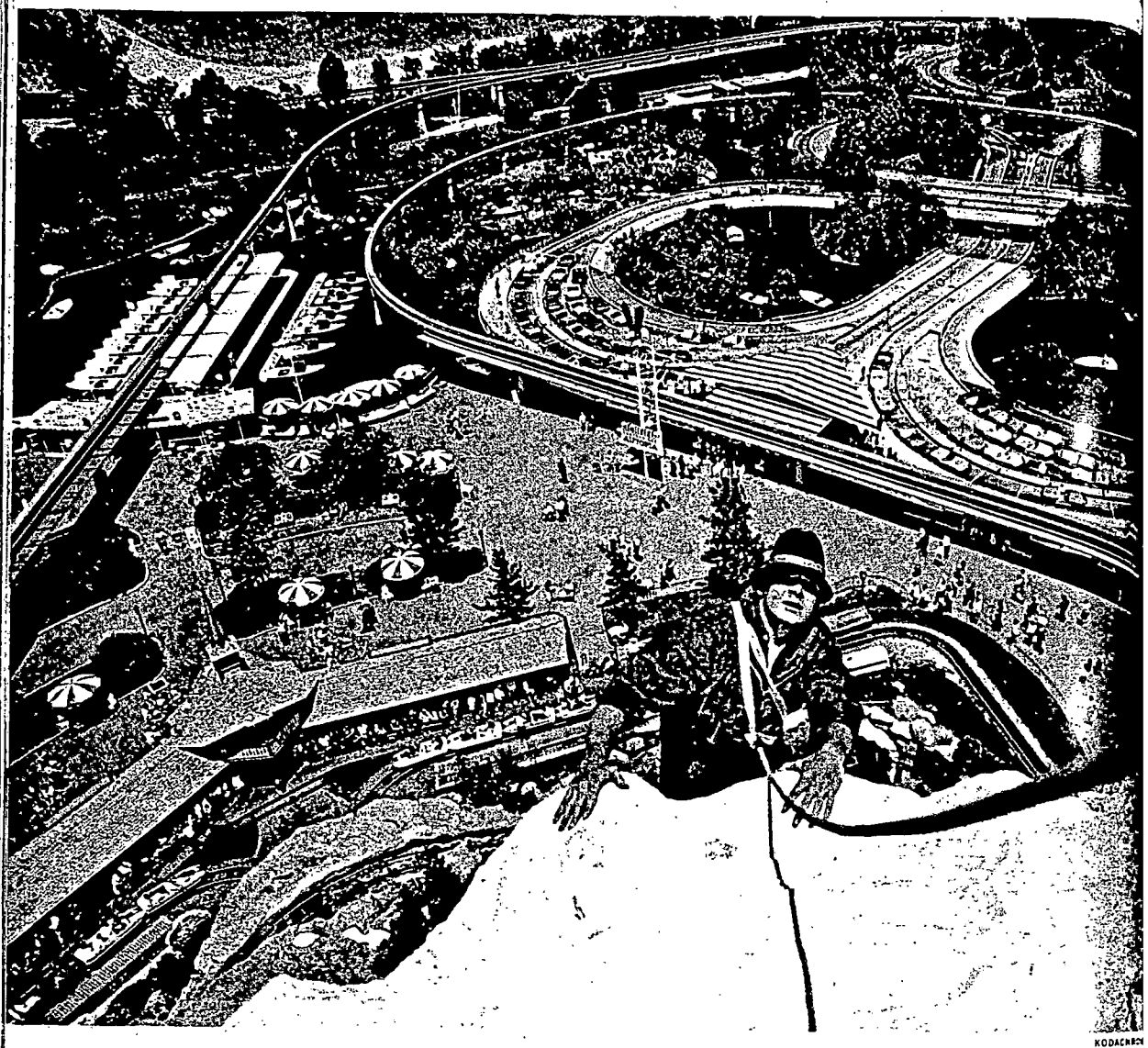
Canopied launch glides past Cambodian temples on the Jungle Cruise, a simulated safari by boat down the Mekong, Nile, Congo, and Amazon Rivers. Live rubber trees, giant bamboos, and brilliant blooms of the hibiscus crowd the banks.

Jaws Agape, Hippos Threaten a Cruise Boat

At every bend make-believe danger awaits: head-hunters brandish spears; gorillas thump chests; bull elephants trumpet madly.



Wide-eyed with wonder, youngsters peer out at a rain forest. "Approaching the rapids; we may not make it!" shouts the captain. But every launch returns.



Mountaineer Jeff Winslow Scales the Mighty Matterhorn Eight Times Daily

Roped for safety, Winslow ascends the 146-foot peak on pitons driven into its concrete shell. Cloverleafs of the junior Autopia circle near a "nuclear" submarine (right). Below the climber, visitors board bobsleds for a breathtaking ride through the hollow mountain.

distillation of Walt's early memories of Chicago and Marceline and Kansas City shortly after the turn of the century.

A gaily cockaded band was tootling. A horsecar rolled along, the horse's rubber shoes making muffled thumps; a double-decked bus stood at the curb; and a balloon seller, hidden behind a great cluster of his wares, looked like a gigantic chrysanthemum. Over a loud-speaker from the Santa Fe and Disneyland Railroad station came the measured voice of the train announcer:

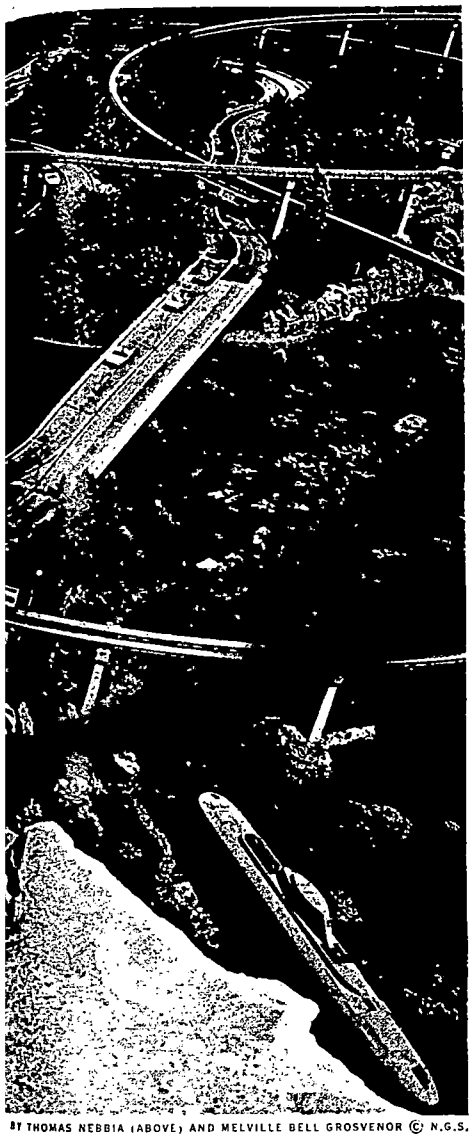
"... now leaving for Adventureland, Frontierland, Fantasyland, and Tomorrowland—all aboarrrd!"

Main Street, U. S. A., sets the tone and pace of Disneyland: It is a place for strolling (page 187). People stop to peer into the windows of the apothecary shop and the old-time general store, and to look over the shoulder of a sidewalk artist as he sketches a portrait. Most of the visitors are grownups. As the park statistics prove, adult guests outnumber children three and a half to one.

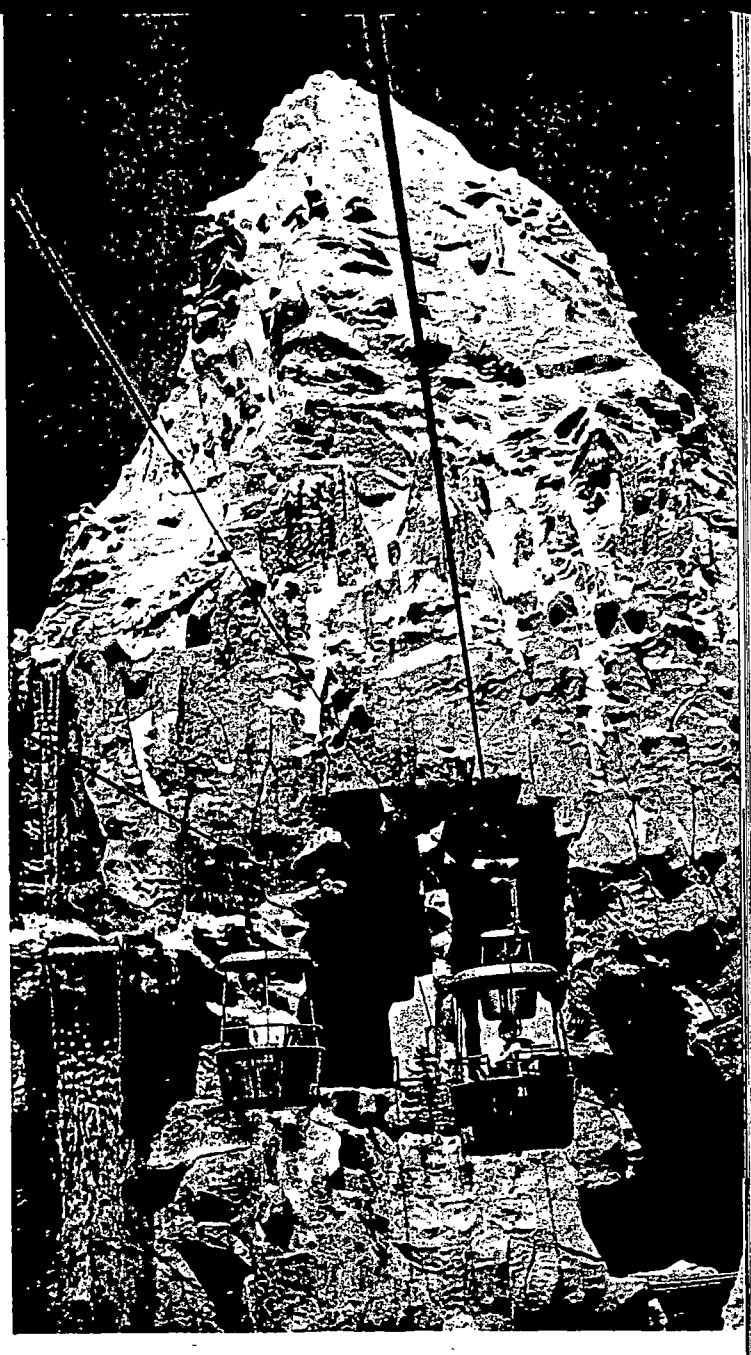
Visitors Fooled by Live Swans

At the end of Main Street, faraway jungle noises made me turn to the left and enter Adventureland.

I took the jungle river cruise (pages 192-3) aboard the sturdy river boat *Ganges Gal,* which chugged past menacing crocodiles, a



BY THOMAS NEBBIA (ABOVE) AND MELVILLE BELL GROSVENOR © N.G.S.



Sparkling paint keeps the Matterhorn perpetually snowcapped; push buttons regulate waterfalls. Skyway cars ride through Glacier Grotto.

ruined temple, and a group of bathing elephants. Gorillas and a tremendous African elephant roared from the tropical vegetation which choked the banks of the stream.

There was some discussion among the passengers about the animals. Were they real? (They were, of course, animated.) But in Disneyland, it is sometimes hard to know where fantasy ends and reality begins. A little later, I watched a pair of ladies peer intently at the live swans sailing on the moat of Sleeping Beauty Castle.

"They are not real," one lady finally said with authority.

I met Bill Evans and Ray Miller, landscape architects for the park, and complimented them on the effects they have created along the jungle stream. They have made Disneyland a must for visiting horticulturists. The park has close to 700 species of plants. It takes at least 30 gardeners to keep them in trim.

We wandered to the base of the Swiss Family Tree House, which opened last fall. I asked what kind of tree it was.

"It was modeled after the banyan tree, *Ficus benghalensis,*" said Ray Miller, "but we call it *Disneyodendron eximius,* which means an out-of-the-ordinary Disney tree."

The 70-foot tree is a copy of the Swiss Family Robinson's tropic domicile, complete with furniture salvaged from their ship.

I took a short cut through Frontierland (pages 183-5) just in time to be caught in the middle of a running gun fight between a rootin'-tootin' sheriff and a Western bad man. Happily, they were using blank cartridges, or the slaughter would have been awesome.

The *Mark Twain,* the stately white river packet, was just leaving her dock for a cruise on the Rivers of America. Across the water, I saw some energetic boys romping on Tom Sawyer Island, while others helped Indians paddle war canoes or rode the high-sided keel boats, the ones used in Disney's *Davy Crockett* movie and television series.

In Fantasyland (pages 188-9) I found myself face to face with larger-than-life-size impersonations of famous Disney characters: the Big Bad Wolf, one of the Three Little Pigs, Minnie Mouse (page 202). The Mad Hatter, his rubber jowls quivering, was trapped in a corner. He was having a hard time defending himself against a mob of children.

The Most Marvelous Submarine

In Tomorrowland, I boarded the submarine *Skipjack,* one of eight submersibles in the Disney fleet. It took me on one of the incredible journeys of the world, though it was made in a mere six million gallons of water rather than an ocean.

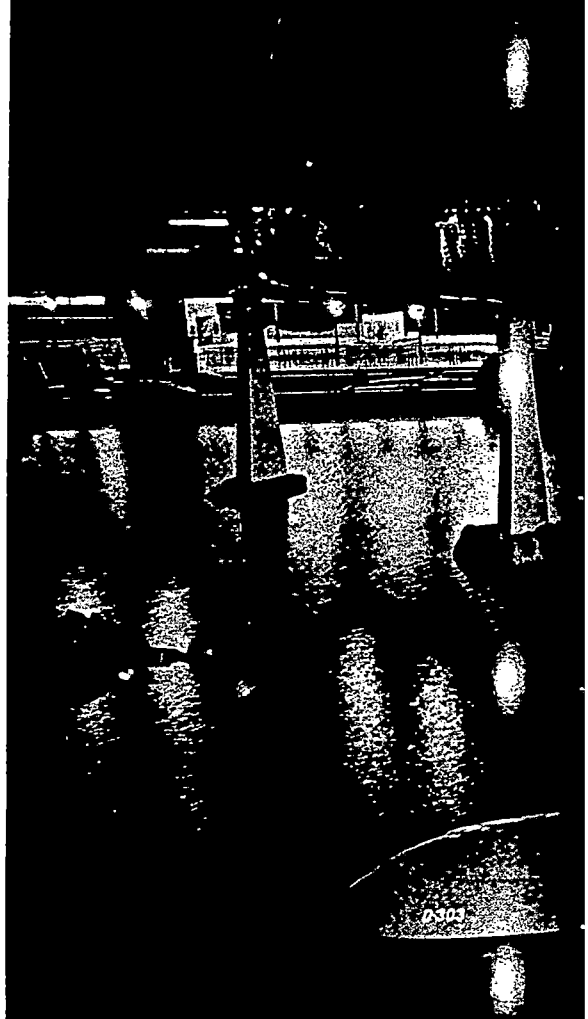
The sub "went under" in a swirl of bubbles and sailed serenely (guided by sonar, the skipper said) through treacherous coral reefs ablaze with animated tropical fish. Giant turtles dined on sea grass. Barracudas, sharks, and a dangerous moray eel loomed from the shadows. In a plunge to the abyss, we saw phosphorescent creatures of the deep.

We passed through the hull of a sunken ship and glimpsed chests filled with gleaming treasure. And, as the skipper explained that we could not expect to see mermaids since they were only figments of imagination, we nosed impolitely into a mermaids' boudoir (opposite).

The sub visited the lost continent of Atlantis, went under the polar ice cap, and finally passed what may be the largest sea serpent in the world. Certainly the largest *cross-eyed* sea serpent.

When I talked with Joe Fowler, the retired admiral who is vice president for Disneyland operations, he said his former Navy colleagues are delighted with the submarines. One, a sub skipper, said, "That's the only time I've ever been on a sub and could see where I was going."

"We were apprehensive that some guests

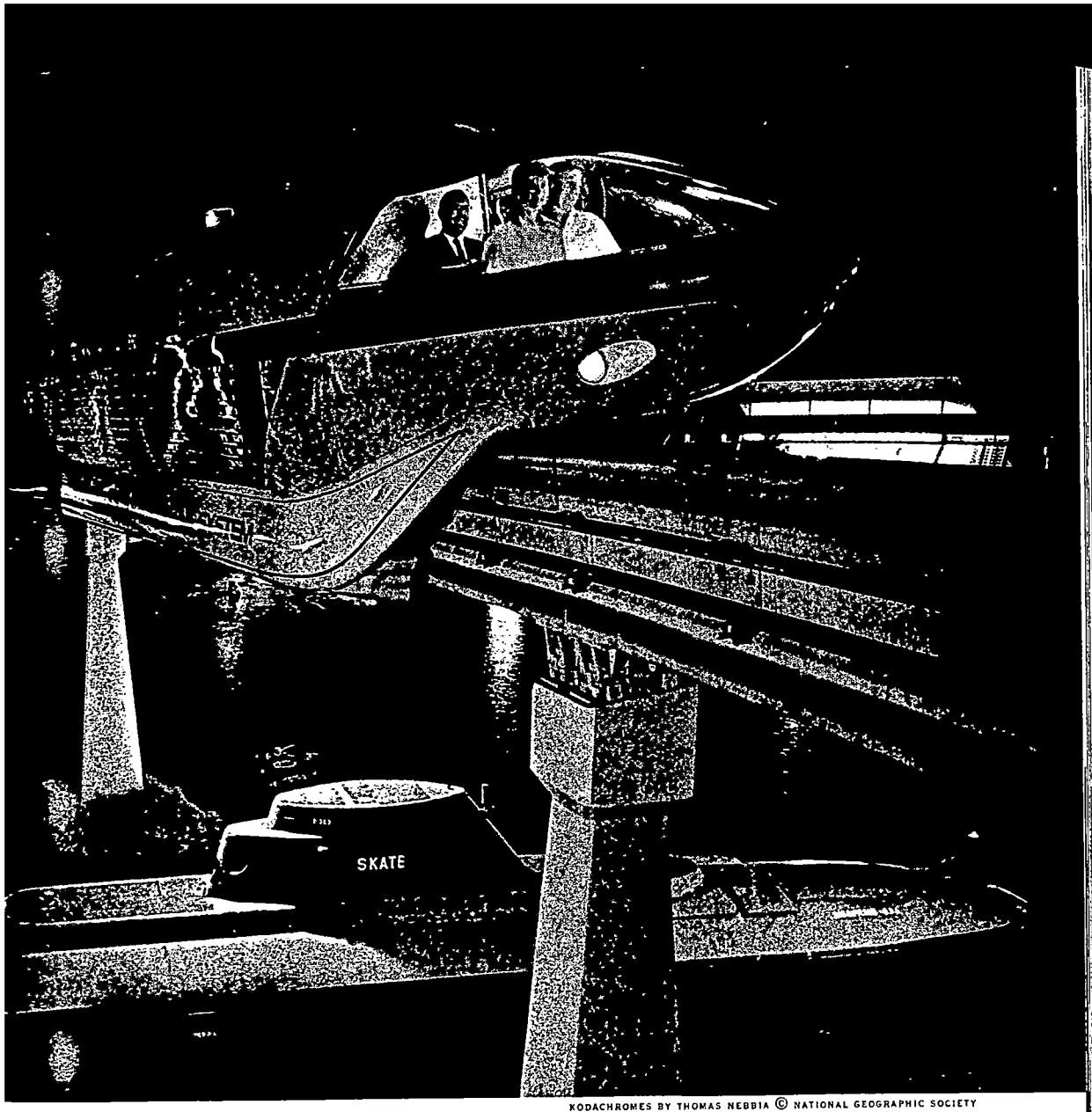


20th-century Transit, Monorail Train and "Nuclear" Sub Pass in the Night

America's first daily-operating monorail train travels on a concrete beamway, attaining 45 miles an hour on straightaways. Gliding noiselessly, it journeys 2½ miles on a winding circuit through Tomorrowland to Disneyland Hotel, just outside the park.

"Dive! Dive!" roars the squawk box of the *Skate* as it skims over its coral lagoon. The order sounds real, and it is—tape-recorded on a U. S. Navy submarine in action. Running on a submerged track, the vessel seems to embark into liquid space. Passengers peer through portholes at the drowned continent of Atlantis and a graveyard of ships. They hear the grunts, whistles, and clicks of fish and shrimp—again genuine sounds recorded in ocean depths.

Snow-white mermaids with flowing tresses preen with mirrors and try on necklaces found in sunken treasure chests.



KODACHROMES BY THOMAS NEBBIA © NATIONAL GEOGRAPHIC SOCIETY





might suffer from claustrophobia in the subs," Fowler told me. "But in my Navy experience, I had learned that few people suffer from claustrophobia if you have moving air and something to see. That's why there's an air jet in front of every porthole."

How to Build a Mountain

Fowler has one besetting problem: "Almost everything we undertake in the park has never been done before," he told me.

He cited the Matterhorn as an example (pages 194-5). The 146-foot-high mountain, which is one hundredth the height of the real Matterhorn, contains 500 tons of structural steel, and almost no two pieces are the same length, size, or weight.

The Disney Matterhorn is a close copy of the real mountain. Disney designers studied hundreds of pictures of the rugged peak, pictures taken during the filming of *Third Man on the Mountain*. Like the original, it also has its mountain climbers, athletes in alpine attire who scale and rappel it eight times daily.

Whereas the real Matterhorn is extremely solid, the Disneyland version is hollow and houses an exciting bobsled ride.

I rode one of the bobsleds and was lifted high inside the mountain. Then my bobsled dipped over a sharp edge and I was on my own—moving around curves, through icy grottos, past waterfalls, and under the Skyway's ski-lift buckets, which take visitors through the mountain for a view of the ice caves. Finally my bobsled dashed into a tumbling mountain stream, which braked it, and the ride was over.

One of the greatest attractions is the Disneyland-Alweg Monorail System which loops in and out of the park (page 197). Disney and Alweg engineers collaborated in the design, and the trains were built at the Disney studio. The monorail is the first of its type—a "piggy-back" design in which the cars are locked to the track.

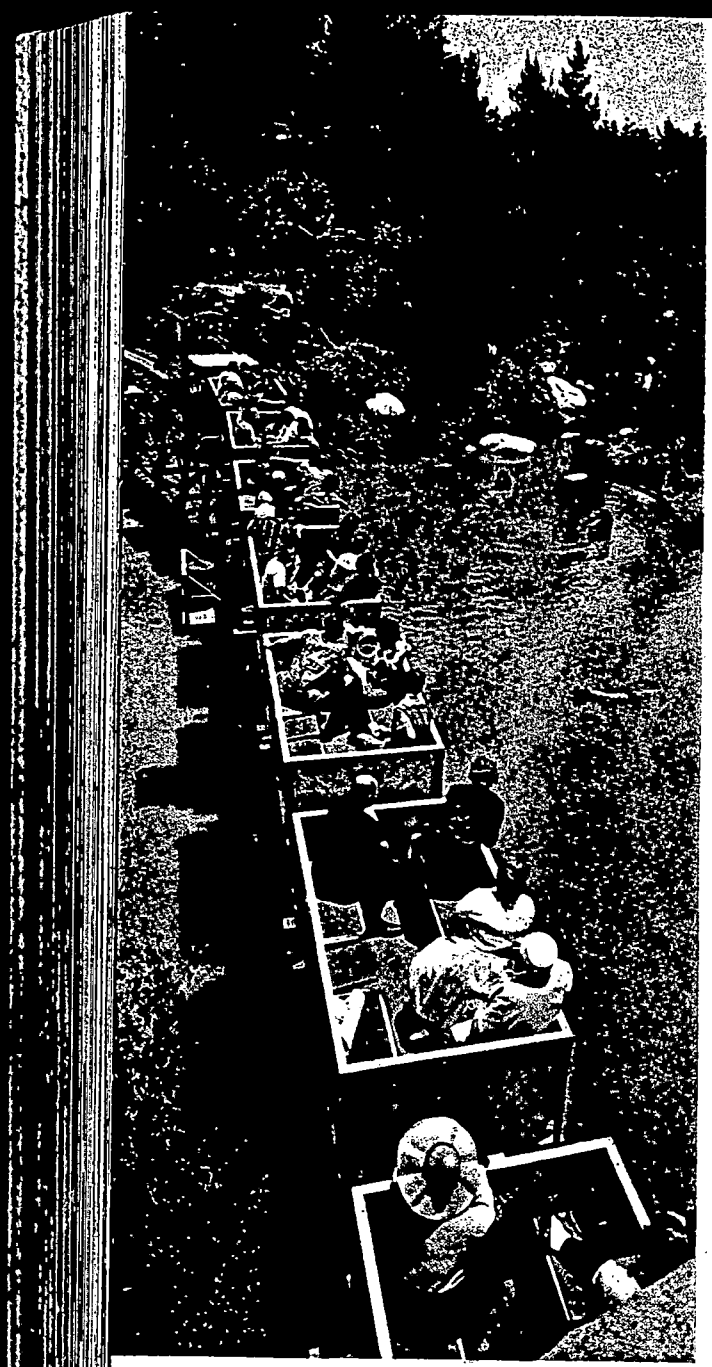
I rode the monorail from the Disneyland Hotel to the park several times. A uniformed girl handed me aboard the long silver train. It started gently, smoothly. We glided over the magic kingdom at 20 miles an hour, silently surveying the wonders below like some satellite from space. Most passengers, myself included, leave the monorail



Ageless as the fictional fairy, 72-year-old aerialist Tiny Kline plays Tinker Bell harnessed to a cable (opposite). But she travels to work by bus: "I'm afraid to ride in a car on the freeways," she says. "They're not safe."

Tinker Bell soars over Sleeping Beauty Castle. Fireworks explode a shower of color each summer evening when Peter Pan's good fairy flies down from the Matterhorn.

KODACHROMES © NATIONAL GEOGRAPHIC SOCIETY





Western Mine Train rides a trestle across Bear River in Nature's Wonderland. Passengers see beavers building dams, bull elk in battle, Gila monsters, peccaries, and marmots—all animated figures.

Diving for dinner (upper right), Disney-built brown bear catches a trout while another draws a bead on a leaping fish.

Colored fountains spout high among glistening stalagmites and stalactites in Rainbow Caverns, the climax of the Mine Train tour.

convinced it is the answer for rapid transit of the future.

I wandered backstage at Disneyland to visit Bud Washo, the head of the staff shop. There I got a glimpse of the Disney future, though its subject matter in this case was the dim past.

At WED Enterprises in Glendale, where all the design work for Disneyland is done, I had watched Blaine Gibson modeling a series of small-scale dinosaurs, cave men, and other prehistoric creatures. Now Bud Washo took me into a barnlike room where Gibson's dinosaurs were being re-created—life-size. An enraged *Tyrannosaurus rex* with a two-foot mouthful of six-inch teeth is something to stand beside—even if it is just clay.

Once the clay figures are completed, plaster molds are made, and then the carefully detailed skin is cast from 3/8-inch Duraflex, which Washo described as a "hot-melt vinyl reformulated for strength."

"Hardly anything affects it," Washo said. "It can take weather, most oils, or gases. It's enormously flexible and durable."

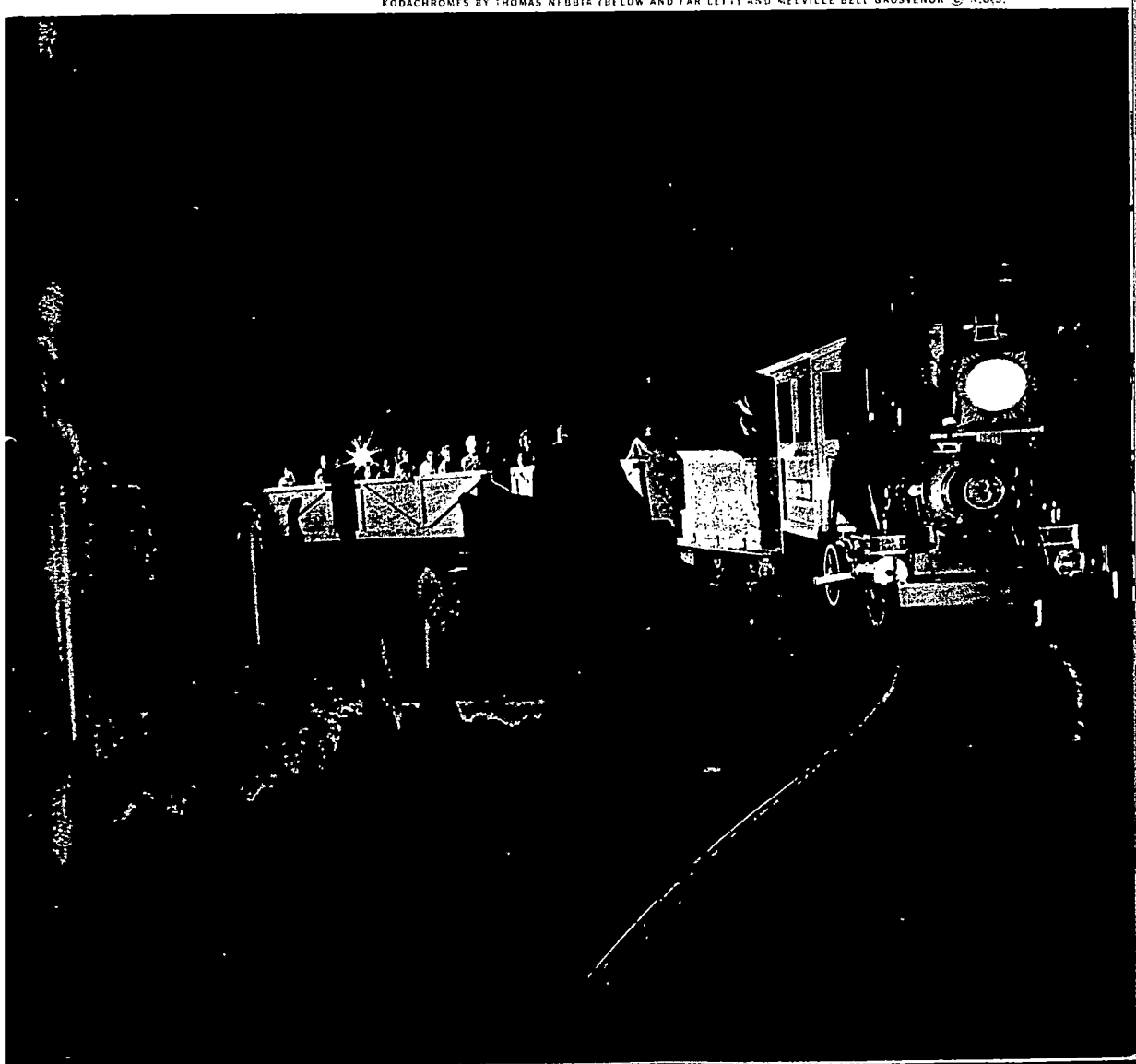
When the casts are finished, the figures are trucked carefully to the studio machine shop, where their animation machinery is installed (page 203).

Dinosaur Will Go to World's Fair

I pointed to a sail-backed dinosaur which was being fitted into its skin and asked: "What will that one do?"

"It will be able to swish its tail from side to side, open its mouth, flex up and down like a lizard, and the sail will sway," Washo said matter-of-factly.

KODACHROMES BY THOMAS NEBBIA (BELOW AND FAR LEFT) AND MELVILLE BELL GROSVENOR © N.G.S.



"Where will the dinosaurs and cave men be used?" I asked.

"They're for the Ford Motor exhibit at the 1964 World's Fair in New York," Bud said.

Plastic Birds Come to Life

One day after lunch, Walt grabbed my arm. "Come on," he said. "I want to show you something."

We walked in the bright sunshine between the stages on the movie studio lot and turned into the machine shop. Four elephants without skins sat in a row, gravely nodding their heads. On a bench lay what looked very much like a human hand, closing and opening silently. Farther down, a prehistoric man waved his arm; someone had incongruously placed a handkerchief in his hand.

On the machinists' benches stood a variety of plastic birds, opening and closing their beaks, turning their heads, and flipping their tails.

Walt stopped to talk to a machinist. I looked at one of the birds. Without its feathers, the creature was a mass of wiring and air tubes. As I watched, this unearthly bird puffed out its chest and began to sing.

A machinist told me that every bird contains five air lines and four sets of wires, plus a tiny loud-speaker.

"This is the latest thing we've done with Audio-Animatronics," Walt said. "We are using the new types of valves and controls developed for rockets. That way we can get extremely subtle motions."

"About that word," I said, "Audio-Animatronics."

"It's just animation with sound, run by electronics," he smiled. "Audio-Animatronics. It's an extension of animated drawings.

"We take an inanimate object and make it move. Everything is programmed on tape: the birds' movements, lighting effects, and sounds. We turn on the tape and the birds do their stuff. At the end, the tape automatically rewinds itself and starts all over again. With tape we could present a program of an hour and six minutes without repeating anything."

"Is anyone else doing this kind of thing?"

"I don't know anyone crazy enough," Walt laughed.

Minnie Mouse nuzzles a new friend at Disneyland, where employees costumed as Disney characters stroll the grounds. Official greeter Mickey Mouse may be the world's most photographed man. About half the visitors bring cameras, and he grants countless requests to pose.

KODACHROME BY THOMAS NEBBIA © N.G.S.



Disney Birds Sing Popular Songs

Several weeks later, Walt invited me to the studio for a showing of the completed mock-up for the Enchanted Tiki Room, scheduled to open in the park this summer.

Now all the birds had been bedecked in colorful feathers, and were individually lighted. Four macaws opened the show with a line of chatter and then swung into a lively calypso number, followed by Offenbach's "Barcarole." A fountain jetted in time to the music under colored lights.

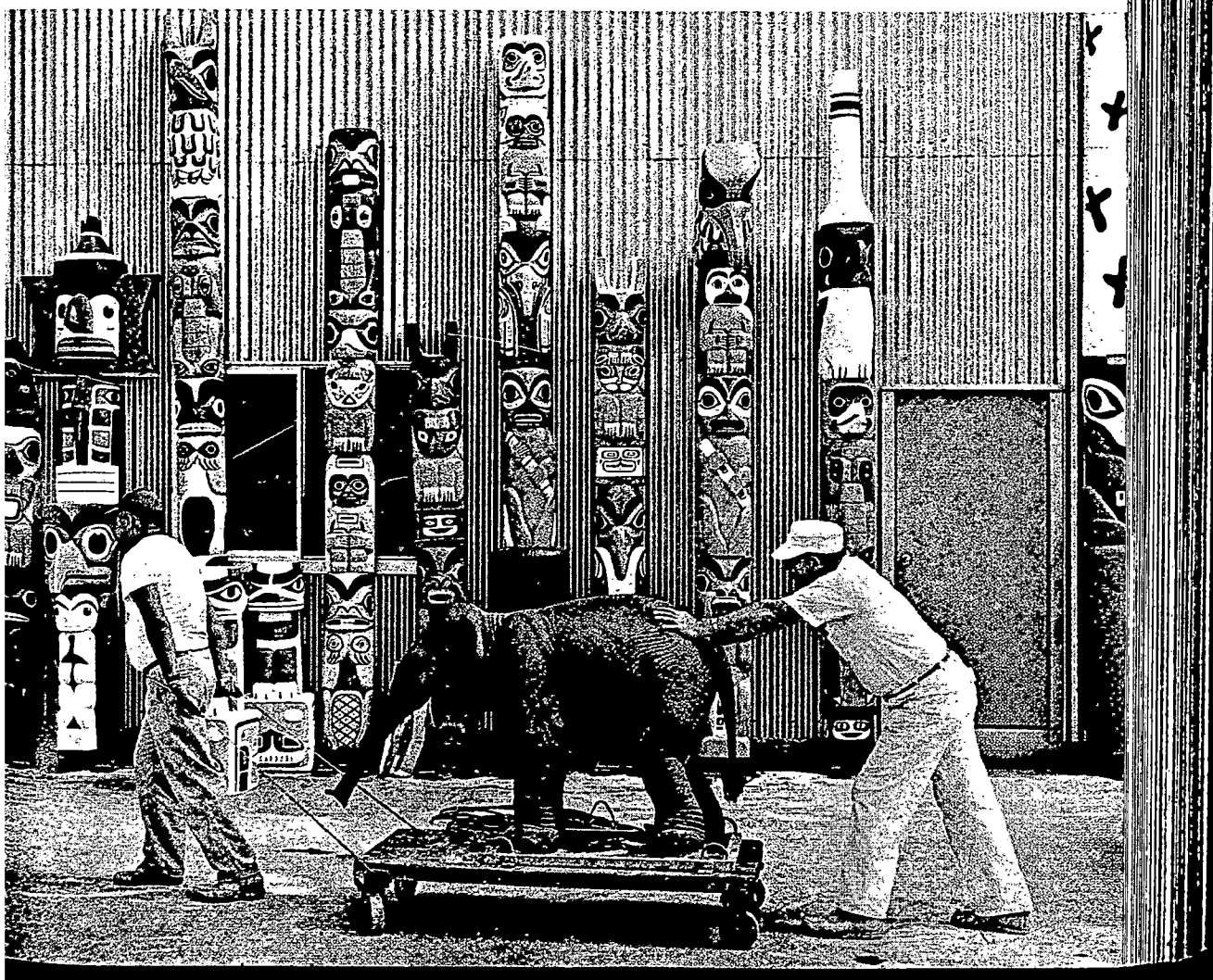
The fountain sent up a particularly high jet and, as it fell back into the bowl, a Bird-Mobile slowly descended from the ceiling, bearing yellow and white cockatoos. They broke loose with



HS EKTACHROME (ABOVE) AND KODACHROME © N.G.S.

"Buttering up" a cave man, technicians solder a shoulder to cover activating mechanism. The figure goes into the exhibit Disney is making for the Ford Motor Company's display at the New York World's Fair in 1964-65.

Lifelike baby elephant, a plastic creation, rides off to enliven the Jungle Cruise. Voyagers will see it wiggling in the shallows and squirting water into the jaws of a crocodile. New totem poles will dress Frontierland's Indian Village.



"Let's All Sing Like the Birdies Sing," and brought down the house.

There was much more: songs sung by orchids and bird-of-paradise flowers; a rain storm; chants by tikis —carvings representing various native gods—accompanied by animated drummers. It is a tremendous show—the climax of more than two years' work at a cost of approximately a million dollars.

Abraham Lincoln Returns to Life

I went out into the street again with Walt and Wathel Rogers, who supervised the Enchanted Tiki Room. We entered another building and I got a shock; I almost bumped smack into Abraham Lincoln!

The illusion was alarming. The tall, lonely man sits in a chair much as in the Lincoln Memorial in Washington, D. C. But this is no cold stone figure; this Lincoln is man-size—and so realistic it seems made of flesh and blood (pages 206-07).

Wathel Rogers made adjustments at an electronic console, and Lincoln's eyes ranged the room. His tongue moved as if to moisten his lips and he cleared his throat. Then with a slight frown, he clasped the arms of his chair, stood up, and began to talk in measured tones.

"What constitutes the bulwark of our own liberty and independence?" he asked.

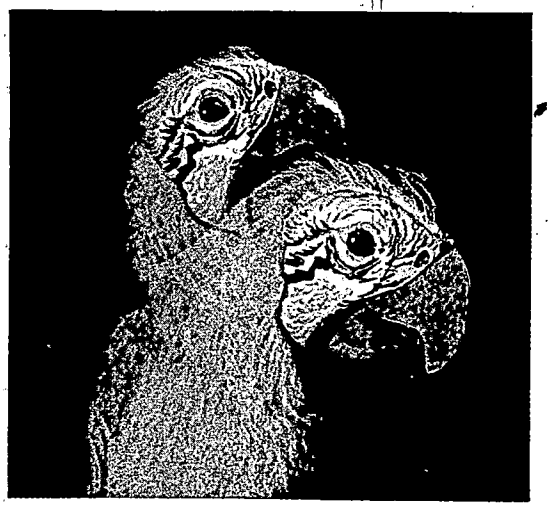
And then he answered: "Our reliance is in the love of liberty which God has planted in us. . . ."

To get an idea of the tremendous animation job this is, try it yourself. Sit in an armchair and pull yourself to your feet, observing how many muscles are called into play and the subtle balance required.

The Lincoln skin is the same Duraflex that has worked so well on the other Audio-Animatronic figures.

"Duraflex has a consistency much like human skin," Rogers said. "It flexes as well as compresses. Rubber, for example, will flex, but won't compress correctly for our needs."

Rogers described the mechanics: 16 air lines to the Lincoln head, 10 air lines to the hands and wrists, 14 hydraulic lines to control the



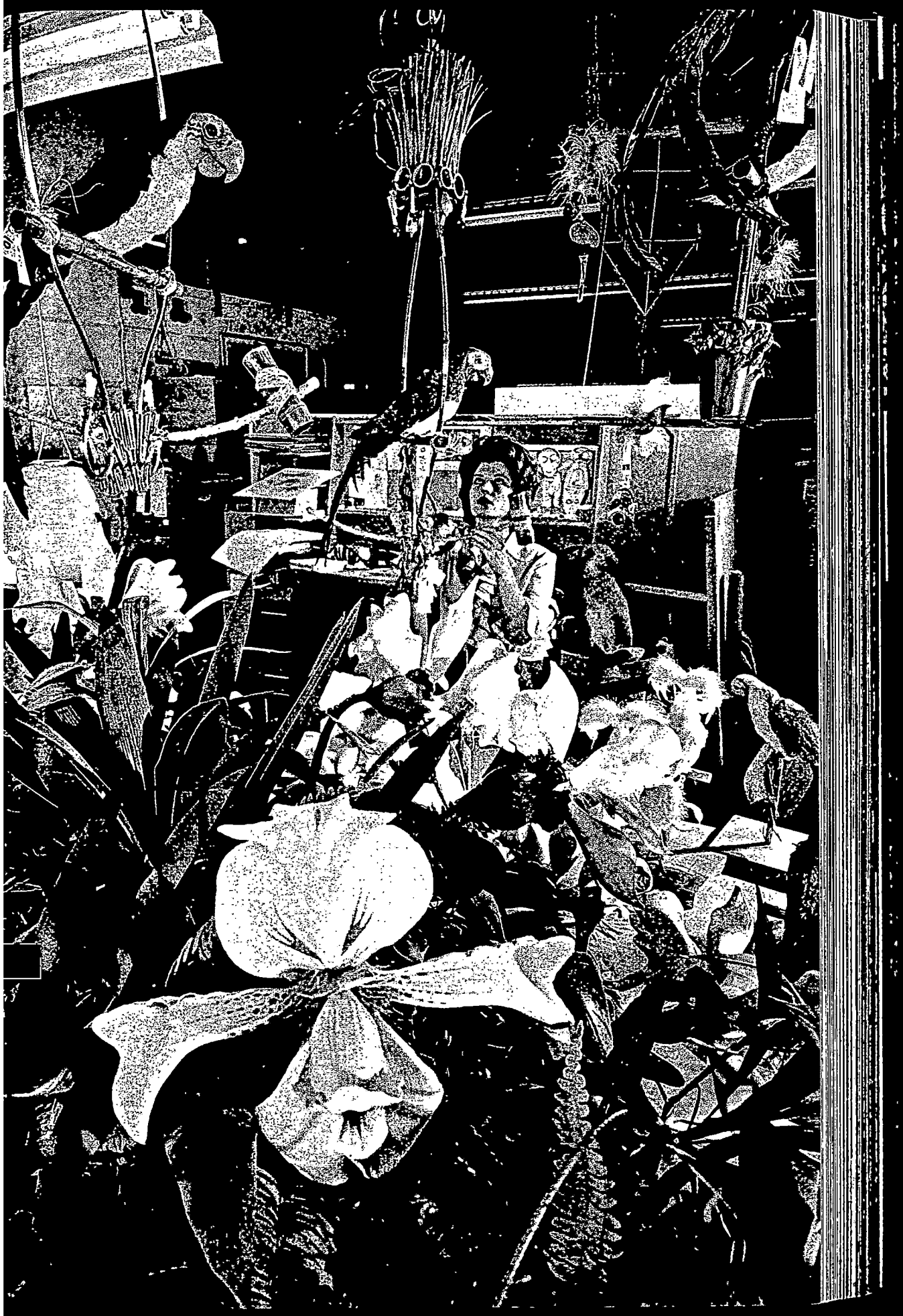
"Buenos días," chirps Jose the macaw as he greets audiences in the Enchanted Tiki Room, named for its carved images of Polynesian gods. Here, in a double exposure, Jose's head moves back and forth as he talks. He is one of 70 performing birds in this showcase for Audio-Animatronics.

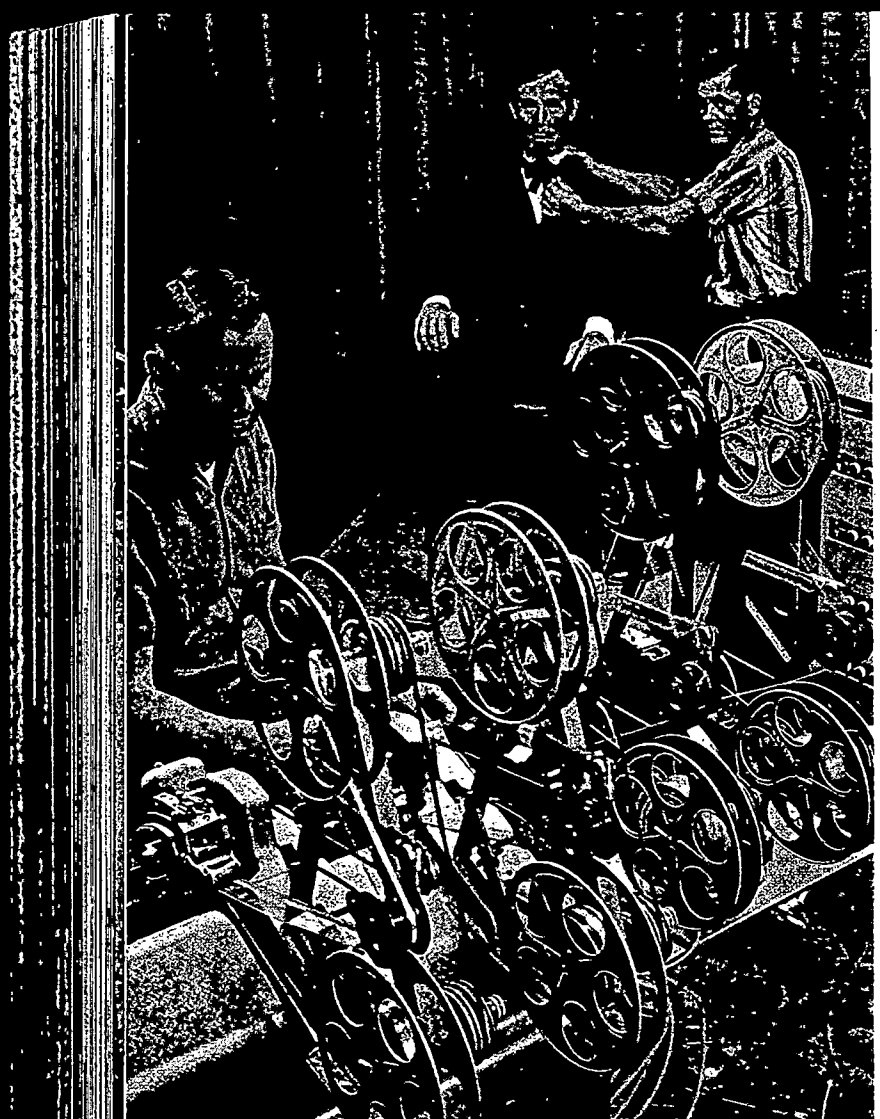
Singing orchids harmonize with birds on golden perches. An artisan decorates a cage prior to the opening of the Tiki Room this summer. Visitors now see a 17-minute show with bird-and-flower versions of "Barcarole," "Let's All Sing Like the Birdies Sing," and "Hawaiian War Chant."

Exotic songster takes shape for the Tiki Room. Like the other birds, it has a plastic body but its feathers are real. Impulses from a tape recorder activate built-in air cylinders, here exposed, that create motion and sound.



KODACHROMES © NATIONAL GEOGRAPHIC SOCIETY





Electronic Wizardry Produces a Lincoln Who Stands and Talks

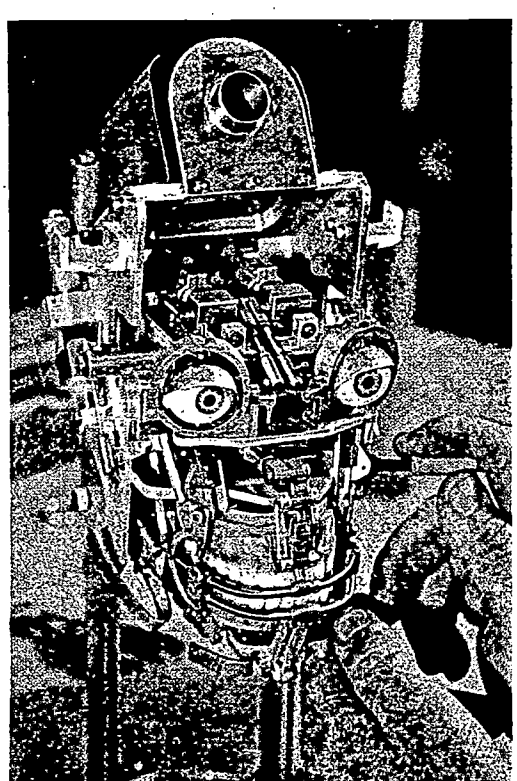
Battery of machines at left records on magnetic tape the voice and movements of the robot. Responding to the tape, an intricate system of pistons inside the plastic figure enables it to make 22 different motions.

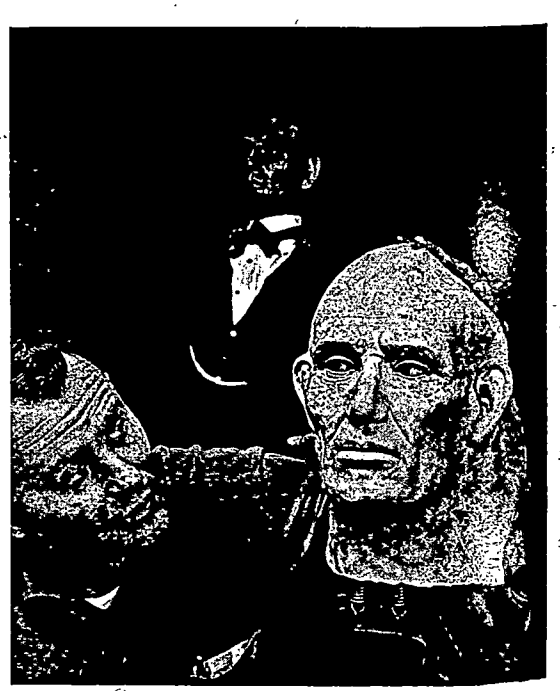
Disney engineers built the Lincoln image for the "One Nation Under God" exhibit, a future Disneyland attraction. In the Hall of Presidents it will sit among life-size statues of the 33 other Chief Executives. At the finale, the effigy will rise from a chair (opposite) and make a three-minute speech of famous excerpts from Lincoln's addresses.

Muscles of Steel Flex the Face of Lincoln

Large coil on the top of the head powers the jaw (lower left). After covering the head with a rigid plastic skull, a technician zips up the skin of flexible plastic (below). An artificial-eye maker supplied the plastic eyes, a wigmaker the human hair.

Mechanical Lincoln raises eyebrows and lifts the tongue while speaking (opposite, lower); the actions employ two of its 15 facial expressions. The figure's makers used Lincoln's life mask as their guide.

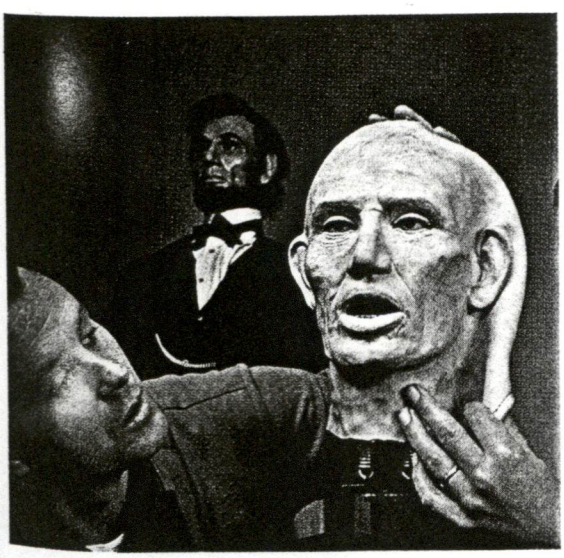




KODACHROMES © N.G.S.



© NATIONAL GEOGRAPHIC SOCIETY



body, and two pairs of wires for every line.

Rogers ran the Lincoln face through some of its 15 expressions. Lincoln smiled at me (first on one side of his face, then the other). He raised each eyebrow quizzically, one at a time, then, fixing me with a glance, frowned and chilled my marrow. And just to show he wasn't really angry, he ended by giving me a genial wink.

"Lincoln is part of a Disneyland project called 'One Nation Under God,'" Wathel Rogers explained. "It will start with a Circarama presentation of great moments in constitutional crises.

"Circarama is a special motion-picture technique Walt developed for Disneyland and the Brussels World's Fair. The Bell Telephone Circarama now at Disneyland tells the story of the great sights of America. It has a 360-degree screen. The audience is surrounded by the continuous action, as if they were moving with the camera and able to see in all directions.

"The Circarama for the 'One Nation Under God' showing will have a 200-degree screen. After the Circarama showing, a curtain will close, then open again to reveal the Hall of Presidents. The visitor will see all the Chief Executives modeled life-size. He'll think it's a waxworks—until Lincoln stands up and begins to talk."

Audio-Animatronic figures are now being planned for Disneyland's French Quarter square in old New Orleans. They will also add chilling realism to the Haunted Mansion now under construction in Frontierland. (Visitors who ask about the mansion are told, "Walt's out capturing ghosts for it now.")

Never Do the Same Thing Twice

What next? Walt enjoys the past but he lives for the future.

"The fun is in always building something," he told me. "After it's built, you play with it a little and then you're through. You see, we never do the same thing twice around here. We're always opening up new doors."

I asked him a doleful question, "What happens when there is no more Walt Disney?"

"I think about that," he said. "Every day I'm throwing more responsibility to other men. Every day I'm trying to organize them more strongly.

"But I'll probably outlive them all," he grinned. "I'm 61. I've got everything I started out with except my tonsils, and that's above average. I plan to be around for a while."

THE END