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San Francisco Southern



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San Francisco

an Francisco holds a secure place in the United States' romantic dream of itself—a cool, elegant, handsome, worldly seaport whose steep streets offer breathtaking views of one of the world's great bays. San Franciscans, according to the dream, are sophisticates whose lives hold full measures of such civilized pleasures as music, art, and good food. Their city is a magic place, almost an island, saved by its location and its history from the overpowering ugliness that, again according to the dream, afflicts so much of the rest of urban California.

For all the truth there may be in this picture, there is, of course, also another San Francisco in which the per capita consumption of alcohol is the highest of any U.S. city, the suicide rate is higher than the national average, and the divorce rate is several times that of New York City. San Francisco is clearly a city in which the tensions between the dream and the reality have been costly.

Furthermore, since World War II, San Francisco has had to come to grips with the common urban problems of pollution of both the air and the water; the ugliness that comes from rampant building, violence, and vandalism; and the decay of the inner city. San Francisco has been shrinking as families, mainly white and middle-class, have moved to its suburbs, leaving the city to a population that, viewed statistically, tends to be older and to have fewer married people and fewer whites than the stereotype has it. Almost one of every two San Franciscans is, in the sterile term of the census taker, "nonwhite"—in this case black, East Asian, Filipino, Samoan, or American Indian. Many others are immigrants from Spanish America. Their dreams increasingly demand a realization that has little to do with the romantic dream of San Francisco.

But both the dreams and the realities are important, for they are interwoven in the fabric of the city that might be called Paradox-by-the-Bay.

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Physical and human geography

THE LANDSCAPE

The city site. Hilly, roughly square, and about 46 square miles (120 square kilometres) in area, San Francisco occupies the northern tip of a peninsula. To its south are the bedroom suburbs of San Mateo County; to the east and northeast is the bay; to the west and northwest lies the Pacific Ocean.

The most prominent of San Francisco's hills are Twin

Peaks, Mt. Davidson, and Mt. Sutro, all more than 900 feet (270 metres) in height. The best known are Nob Hill, where the wealthy "nobs" built extravagant mansions in the 1870s, and Telegraph Hill, which once looked down on the Barbary Coast, a neighbourhood alive with gaudy wickedness. Thanks to the pioneer planners' prejudice in favour of a squared-off grid, the downtown streets march intrepidly up precipitous slopes, terrifying newly arrived drivers, making the cable cars more than sentimental anachronisms, and providing splendid views of the bay.

San Francisco Bay is a drowned river valley, submerged during the melting of the last glacial ice sheet. Enthusiastic and profitable filling of the tidelands has reduced its area at mean high tide from about 700 square miles in 1880 to a mere 435 square miles. More than half of the bay is still fillable, but in 1965 the state legislature created the Bay Conservation and Development Commission to control further landfill projects. At its widest point the bay measures 13 miles (21 kilometres) and at its deepest, in the Golden Gate channel, 357 feet. The maximum daily flow of water through the Golden Gate into the Pacific is seven times the flow of the Mississippi River at its mouth.

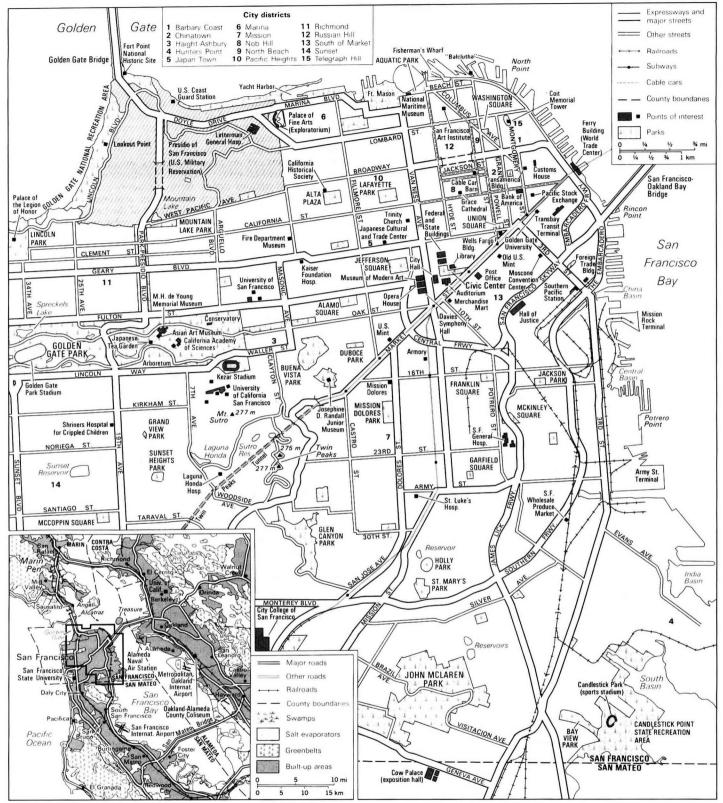
Within the portion of San Francisco Bay lying inside the city limits are the natural islands of Alcatraz and Yerba Buena and man-made Treasure Island, created for a world's fair in 1939 and later turned into a naval base. Alcatraz (Spanish: "Pelican") was from 1934 to 1963 the most notorious maximum-security, "escape-proof" prison in the United States. In 1969, after the decaying cell blocks had been given up by the Federal Bureau of Prisons, a multi-tribal group of American Indians invaded the island and asserted their rights to abandoned federal property, but they were forcibly evicted in 1971. The island became part of the Golden Gate National Recreation area in 1972.

Climate. Winter in San Francisco is rainy and mild, the spring sunny and mild, the summer foggy and cool, and the autumn sunny and warm. The average minimum temperature is 51° F (11° C), the average maximum, 63° F (17° C). The mean rainfall, almost all of which occurs between November and April, is about 21 inches (533 millimetres). The sun shines during two-thirds of the possible daylight hours. The most characteristic feature of the weather, however, is the summer fog, which lies low over the city until midday, creating consternation among shivering tourists. This fog is a phenomenon of temperature contrasts created when warm, moist ocean air comes in contact with cold water welling up from the ocean bottom along the coast.

The city layout. The central business district, the financial district, North Beach, and Chinatown occupy the site of the Gold Rush city, expanded by progressive fillings along the waterfront. The bones of many a ship deserted in 1849 now lie under business buildings several blocks inland. To the west, at the approach to the Golden Gate Bridge, lies the Presidio, a U.S. military reservation remarkable for its parklike lawns and stands of trees. South of the Presidio is Golden Gate Park, reclaimed from a one-time sandy desert. The rest of San Francisco is largely composed of the residential neighbourhoods, from Pacific Heights, in which the old, moneyed families live, to Hunter's Point, which is predominantly black.

A great change, which has been described as the Manhattanization of San Francisco, became apparent after the late 1960s, and it has been both welcomed and excoriated. In the financial district in particular, one tall building after another has been built in a city in which, for generations, few buildings were higher than 20 stories. Among the modern skyscrapers are the Bank of America Center (52 stories) and the Transamerica Corporation building (48 stories and a 212-foot spire), which rises to a point like an elongated pyramid. (K.La./G.C.Ha.)

The hills and dizzying streets



Central San Francisco and (inset) its metropolitan area.

Concern has also arisen from the experience that San Francisco shares with no other U.S. city-destruction by earthquake. Severe quakes have been felt in 1868, 1898. 1900, 1906, and 1989. But it was the 1906 earthquake that did the most damage and that has become identified with the city. That quake, which occurred on April 18, was followed by a fire that destroyed the centre of town and burned for four days, until the ashes were wetted down by rain. Four square miles, making up 512 blocks in the centre of town, were gone, along with 28,000 build-

ings and a total property value of about \$350,000,000. Approximately 700 people died; 250,000 were left homeless. Survivors camped in Golden Gate Park. An Eastern newspaperman, celebrating the survival of a local distillery, composed the verse, "If, as some say, God spanked the town / For being over frisky, / Why did he burn the Churches down / And save Hotaling's Whisky?

Since the 1906 earthquake, seismologists and engineers have warned that it could happen again. Several relatively strong earthquakes (measuring more than 5.0 on

The great earthquake and fire of 1906

the Richter scale) have since hit the city and caused little damage, but the 1989 quake (7.1 on the Richter scale) did destroy some structures within the city and even more in the surrounding areas. Modern office towers, however, were largely unaffected, indicating that new building methods may provide some protection for the city.

(K.La./G.C.Ha./Ed.)

THE PEOPLE

The pattern of immigration into San Francisco during the latter half of the 19th century was significantly different from that of anywhere else in the United States. The waves of newcomers included not only native-born Americans moving west but also Europeans arriving directly by ship without previous Americanization along the Eastern Seaboard. The demography of the gold-rush city was summed up concisely by a real-estate firm that advertised that it could "transact business in the English, French, German, Spanish and Italian languages." San Francisco remains one of the two most European of American cities-New Orleans is the other-and surely the most Mediterranean. Italians have remained the dominant European minority, followed by Germans, Irish, and British.

The blacks. Before World War II about 20,000 blacks lived in the entire Bay Area, about 4,000 of them in San Francisco. The 24-fold increase during the next 30 years was set in motion by the war, which brought at least 500,-000 war workers to the Bay Area's shipyards and other industries. Among them were tens of thousands from the South, who settled mainly in San Francisco, Oakland, and Richmond. In San Francisco they moved into the old Carpenter Gothic houses in the blocks around Fillmore Street, vacated when the Japanese were driven into wartime internment camps. By the 1980s the character of the district was shifting again as the renovation of these houses and the high cost of property caused rents to rise. Poorer black residents were being forced out of their neighbourhoods and into slum housing in the city's already crowded southeastern sector. An increasing number of black men and women have become prominent in the city's life, however, and blacks have won many elective offices.

The Chinese. Chinatown, which is said to be the largest Chinese community outside of Asia, is also probably the least understood minority community in the city. The colourful shops and restaurants of Grant Avenue mask a slum of crowded tenements and sweatshops that has the highest population density in an already densely populated city. Increasingly, Chinese have moved into North Beach, hitherto predominantly Italian, onto the nearby slopes of Russian Hill, or into the Richmond district north of Golden Gate Park. Many of those who reside in Chinatown are more recent immigrants, from Hong Kong in particular, who prefer their native tongue and way of life.

The Japanese. Never as large as Chinatown, the Japanese community of San Francisco was wiped out at a single stroke by the infamous Executive Order 9066 of 1942, which sent them, foreign-born and native alike, into "relocation centres" that were, in all but name, concentration camps. The present centre of the Japanese community is Japan Town (Nihonmachi), a few blocks east of Fillmore Street. There an ambitious trade and cultural centre has risen, with restaurants, a hotel, shops, and business establishments. Though the rising generation of Japanese-Americans go to Japan Town as visitors, bound for celebrations or to buy imported goods, their own roots are elsewhere

The Spanish-speaking. Few visitors see the Mission district, which is a great irony because the historic origins of the city extend to Spain and Mexico and the Spanishspeaking population rivals the Chinese as the second greatest ethnic minority.

Before World War II the Mission district, named for the Mission Dolores, was principally blue-collar and Irish. The Irish have largely been replaced by Spanish-speaking immigrants, mainly from Central America and Mexico. Living among them are pockets of American Indians and Samoans.

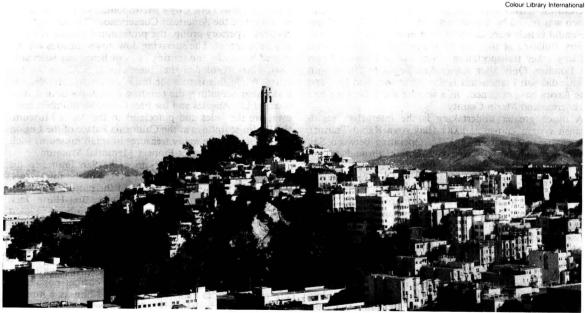
The Filipinos. The Filipino community in San Francisco has grown remarkably since World War II and spread to all areas of the city, especially the South of Market area. Filipinos have become an active ethnic group, particularly in the fields of politics, education, and business. They are known for their high literacy rate and their love of the arts and music.

THE ECONOMY

The gold rush to California (1848-49) and other western territories and states in the mid-1800s established San Francisco as the premier city of the West, known from the Oregon border to the pueblo of Los Angeles simply as the City. It is still a great port, the financial and administrative capital of the West, and a substantial centre for commerce and manufacturing.

A large portion of the city's employed work in the area of finance. Other leading areas of employment include business services (personnel supply, building maintenance, security, computers and data processing, advertising), retail trade, the tourist and convention industry, and professional service. Many companies have chosen to locate their national headquarters in San Francisco.

Components of the economy



The Coit Memorial Tower on Telegraph Hill, San Francisco; at left is Alcatraz Island in San Francisco Bay.

Ethnic minorities

The

ferries

once-busy

The port. From its beginnings as a port of call in the hide-and-tallow trade and, later, as the home port of the Pacific whale fishery, San Francisco has always been acutely conscious of the importance of shipping. In the 19th century ships sailed around Cape Horn or from the Isthmus of Panama, and "steamer day" was a civic institution; after 1914 cargo and passenger vessels arrived from the East by way of the Panama Canal. In 1867 the Pacific Mail Steamship Company opened the first transpacific service, sailing from San Francisco to Yokohama and Hong Kong.

Imports and exports passing through the San Francisco Customs District make the combined ports of San Francisco Bay-San Francisco, Oakland, Alameda, Sacramento, and Stockton—one of the most active international ports in the country.

Industry. Manufacturing is the main source of income in the Bay Area. In San Francisco, in which manufacturing is a lesser source of income, the principal industries are apparel and other textile products, food processing, and shipbuilding, while the aerospace and electronics industries are strong in the cities of the peninsula.

Finance. A financial centre since the first pinch of gold dust was exchanged for hard cash, San Francisco is the seat of the Pacific Stock Exchange as well as the headquarters of many banks, among them the Bank of America and the Wells Fargo Bank. In banking activity San Francisco ranks second only to New York City.

Transportation. Los Angeles long ago surrendered unconditionally to the automobile; San Francisco has on occasion rebelled and found it possible to oppose "progress." A monument to this revolt is the elevated Embarcadero Freeway, which stops dead as if sliced off by a guillotine. Again, angry citizens in 1964 defeated the state highway commission when it threatened to run a freeway through the "panhandle" of Golden Gate Park.

Among the serious problems that remain is periodic smog, produced mainly by the cars in the area. (An airpollution-control district was formed in 1955.) Another problem is that access to San Francisco from its commuter towns is largely by a network of freeways that are highly congested at rush hours. Travel from the East Bay cities of Oakland and Berkeley and from Marin County to the north is over two great but overburdened bridges. The 41/2-mile-long San Francisco-Oakland Bay Bridge, completed in 1936, consists of two back-to-back suspension bridges, a connecting tunnel on Yerba Buena Island, five truss spans, and a cantilever span. The orange-red Golden Gate Bridge, leading north to Marin County, was completed in 1937. It is a pure suspension bridge with a 4,200-foot centre span.

Until the ferries were doomed by the bridges, San Francisco was served by a great network of ferry routes whose splendid vessels were said to deliver more passengers to the Ferry Building at the foot of Market Street than arrived at any other transportation depot except Charing Cross in London. Only after the bridges began to choke with traffic did San Franciscans realize what they had lost, and the ferries have returned, on a smaller scale, between San Francisco and Marin County

A much greater undertaking is the interurban rapidtransit system known as BART (Bay Area Rapid Transit). which began operating in 1972. Operating between San Francisco and the East Bay communities through an underwater tube more than 31/2 miles long, BART was the first system of its sort, part subway and part elevated, to be built in half a century, but it does not resemble the older systems in all respects. Comfortable, computerized automatic trains running at speeds averaging 80 miles an hour are a major feature.

San Francisco is situated at the head of a peninsula, and it has always been a dead end for rail traffic, with the transcontinental trains (the first westbound train arrived over the tracks of the Central Pacific on September 6, 1869) discharging their passengers in Oakland, whence they were carried to San Francisco by ferry and by bus. As in the rest of the country, the railroad's importance has declined since World War II. For carrying goods, trucking has largely taken over.

San Francisco International Airport is located seven miles south of the city-county limits, on a filled site on the southwestern shore of the bay. It is owned and operated by the municipal government.

ADMINISTRATION AND SOCIAL CONDITIONS

Government. Unlike any other California city, San Francisco (incorporated 1850) has a consolidated citycounty government. The 1932 freeholders' charter, under which the city-county still operates, provides the mayor with strong executive powers but delegates substantial authority to a chief administrative officer (appointed by the mayor) and a controller. The legislative authority is lodged with an elected board of supervisors. The other key officials are the superintendent of schools and the manager of utilities, both appointed.

Public utilities. Since 1934 San Francisco's principal source of water has been the Hetch Hetchy Reservoir, 167 miles away, in the High Sierra. Other sources are the Calaveras Reservoir in Alameda County and reservoirs in San Mateo County to the south. The Hetch Hetchy project required the damming of a valley in Yosemite National Park almost as splendid as the Yosemite Valley itself and the construction of tunnels, one 25 miles long, through the Coast Range. In 1902 the first high-voltage line transmitting hydroelectric power was completed between a powerhouse on the Mokelumne River and San Francisco, some 180 miles away. Since then, the Bay Area has developed a network of hydroelectric plants on the rivers of the interior, as well as a steam-powered plant on Monterey Bay.

Education. Although strictly speaking they cannot be counted as San Francisco institutions, the greatest universities in the Bay Area are the University of California, located across the bay in Berkeley, and Stanford University, down the peninsula in Palo Alto. Within San Francisco itself noted institutions of higher education are the University of San Francisco (Jesuit) and San Francisco State University (formerly San Francisco State College), which was founded as a normal school in 1899 but has achieved national prominence for its academic excellence. Other institutions include Golden Gate University, the City College of San Francisco (a two-year public college), and the San Francisco Art Institute.

CULTURAL LIFE

San Francisco is the home of two major musical organizations. The San Francisco Symphony performs in the Louise H. Davies Symphony Hall and gives pop concerts in the summer. The San Francisco Opera enjoys an early season so that its leading singers may fulfill their commitments at New York City's Metropolitan Opera. With the exception of the American Conservatory Theatre (ACT), a resident repertory group, the professional theatre is virtually nonexistent. The surviving downtown theatres are occupied largely by the touring casts of Broadway successes.

San Franciscans feel that their city is a haven for the artist. While this is true for those who value architecture and public sculpture, the painting collections do not rival those of Los Angeles and the East Coast. Memorable, however, are the jades and porcelains in the Asian Museum, the Rodin sculptures at the California Palace of the Legion of Honor, and the many treasures in small museums such as the Fire Department Pioneer Memorial Museum.

One of the greatest writers to make San Francisco his home, although only for a short period in the mid-1860s. was Mark Twain. Other notables of the past century have included Frank Norris, Ambrose Bierce, Bret Harte, Jack London, and Robert Louis Stevenson, who lived in great poverty in a boarding house. During the mid-1950s San Francisco was one of the major gathering places for the Beat poets, including Lawrence Ferlinghetti (publisher and cofounder of the City Lights bookstore, which became a shrine of the movement), Gregory Corso, Allen Ginsberg, Jack Kerouac, and Gary Snyder. The current population of writers includes many reputable practitioners, a number of whom are affiliated with the creative writing program on the campus of San Francisco State University.

A most vital part of San Francisco culture from the

The Beat poets beginning has been found in its restaurants, hotels, and drinking places. To this must be added the popular culture of the ethnic enclaves—Chinatown, the Italian community of North Beach, the black culture of the Fillmore district, Japan Town, the Russian colony along Clement Street, and the Spanish-speaking Mission district.

San Francisco's greatest contribution to the nation's life, however, has had nothing to do either with its ethnic cultures or with its officially anointed institutions—or, indeed, as has been suggested, with the emergence of the "topless" dancer in a North Beach nightclub in 1964. Instead, it was the unheralded appearance in 1967 of the "flower children," a generation of young people, long of hair and usually grubby in appearance, who declared themselves in headlong flight from the Great Society and preached the saving graces of peace and love. Unfortunately, by the 1970s the main street of their capital, the Haight-Ashbury district, had turned into an ugly and dangerous marketplace for drugs.

San Francisco also emerged, for a period in the late 1960s, as a capital of rock music, which achieved national prominence for the San Francisco sound of such groups as the Jefferson Airplane, the Grateful Dead, and the Quicksilver Messenger Service, as well as such individual performers as Janis Joplin. The city has become a centre for advocates of rights for homosexuals and has one of the largest homosexual communities in the country.

History

EXPLORATION AND EARLY SETTLEMENT

It is extraordinary that the site of San Francisco should have been explored first by land instead of from the sea, for San Francisco Bay is one of the most splendid natural harbours of the world, and great captains and explorers sailed unheeding past the entrance—Juan Rodríguez Cabrillo (1542-43), Sir Francis Drake (1579), and Sebastián Vizcaíno (1602). In 1769 a scouting party from an expedition led by the Spanish explorer Gaspar de Portolá looked down from a hilltop onto a broad body of water, the first white men known to have seen San Francisco Bay. It was not until August 5, 1775, that the first Spanish ship, the "San Carlos," commanded by Lieut. Juan Manuel de Ayala, turned eastward between the headlands, breasted the ebbing tide, and dropped anchor just inside the harbour mouth. (Though it is possible that Drake may have entered the bay, most evidence is against it.)

Settlers from Monterey, under Lieut. José Joaquin Moraga and the Rev. Francisco Palóu, established themselves at the tip of the San Francisco peninsula the next year. The military post (which remains in service as the Presidio of San Francisco) was founded September 17, 1776, and the Mission San Francisco de Asis (popularly called the Mission Dolores) was opened on October 9.

Almost half a century later, a village sprang up on the shore of Yerba Buena Cove, two miles east of the mission. The pioneer settler was an Englishman, Capt. William Anthony Richardson, who in 1835 cleared a plot of land and erected San Francisco's first dwelling—a tent made of four pieces of redwood and a ship's foresail. In the same year, the United States tried unsuccessfully to buy San Francisco Bay from the Mexican government, having heard reports from whalers and captains in the hide-andtallow trade that the great harbour held bright commercial possibilities. Richard Henry Dana, whose ship entered the bay in 1835, wrote in *Two Years Before the Mast* (1840) that "If California ever becomes a prosperous country, this bay will be the centre of its prosperity."

The Americans had to wait only another 11 years. After fighting began along the Rio Grande, Capt. John B. Montgomery sailed the sloop of war "Portsmouth" into the bay on June 3, 1846, anchored in Yerba Buena Cove, and later went ashore with a party of sailors and marines to raise the U.S. flag in the plaza. On January 30, 1847, Yerba Buena was renamed San Francisco, which was regarded as a more propitious name for the town's future development.

The permanent white population of Yerba Buena in 1844 did not exceed 50 persons. By 1846 the settlement

had a white population of 375 in addition to 83 blacks, American Indians, and Sandwich Islanders (Hawaiians). Two years later, just before the discovery of gold on the American River, the town had grown to about 200 shacks and adobes inhabited by about 800 whites.

THE GROWTH OF THE METROPOLIS

The city of the '49ers. With the discovery of gold, San Francisco picked up pace and direction. The modest village was at first almost deserted as its population scrambled inland to the Mother Lode, and then it exploded into one of the most extraordinary cities ever constructed. Some 40,000 gold hunters arrived by sea, another 30,000 plodded across the Great Basin, and still another 9,000 moved north from Mexico. By 1851 more than 800 ships rode at anchor in the cove, deserted by their crews.

Everybody except the miners got rich. Eggs sold for \$1 apiece, and downtown real estate claimed prices that would almost hold their own against the appreciated values of the late 20th century. Until the bubble burst in the Panic of 1857, 50,000 San Franciscans became rich and went bankrupt, cheated and swindled one another, and took to the pistol and knife all too readily. As *The Sacramento Union* noted in 1856, there had been "some fourteen hundred murders in San Francisco in six years, and only three of the murderers hung, and one of these was a friendless Mexican." Two vigilance committees (1851 and 1856) responded to the challenge with crude and extralegal justice, hanging four men apiece as an example to the others.

In 1859 silver was discovered in the Nevada Territory. The exploitation in Nevada of the Comstock Lode, which eventually yielded \$300,000,000, turned San Francisco from a frontier boomtown into a metropolis whose leading citizens were bankers, speculators, and lawyers who dressed their ladies in Paris gowns and ate and drank in splendid restaurants and great hotels.

San Francisco then was by all accounts an intoxicating city whose many charms moved the historian-moralist B.E. Lloyd to advise parents in 1876

to look closer to their daughters, for they know not the many dangers to which they are exposed . . . and to mildly counsel their sons, for when upon the streets of this gay city they are wandering among many temptations.

The 1860s and 1870s marked the birth of the modern San Francisco, which has for more than 100 years laid claim with some justice to being the Athens, Paris, and New York City of the West but which never completely lost the mark of its wild beginning. As Rudyard Kipling was to observe after he visited the city in the 1890s, "San Francisco is a mad city, inhabited for the most part by perfectly insane people whose women are of remarkable beauty."

The 20th century. San Francisco's growth in the first half of the 20th century was shaped by two cataclysmic events. The first of these was the great earthquake and fire of 1906, which destroyed the central business district. Between 1906 and 1910, however, the city rebuilt atop its ashes. The other cataclysm was World War II, during which hundreds of thousands of servicemen passed through San Francisco on their way to the war in the Pacific or were stationed in and around the city; in addition, some 500,000 people came to work in the war-related industries in the area and settled temporarily in the cities around the bay. This was the beginning of the great postwar surge in the San Francisco area's permanent population.

BIBLIOGRAPHY. For accounts of the early history of San Francisco, the serious reader should not be discouraged by the voluminousness and variousness of the works of the historians HUBERT HOWE BANCROFT and THEODORE H. HITTELL, the latter of whom is particularly readable. FRANK SOULÉ, JOHN H. GI-HON, and JAMES NISBET, The Annals of San Francisco (1855), is invaluable; while BENJAMIN E. LLOYD, Lights and Shades of San Francisco (1876), is both vivid and divertingly moralistic. HERBERT ASBURY, The Barbary Coast (1934, reprinted 1968), is a classic account of the underworld; while JULIA COOLEY ALTROCCHI, The Spectacular San Franciscans (1949), is a useful social history. JOHN HASKELL KEMBLE, San Francisco Bay: A Pictorial Maritime History (1957), contains a splendid collection of drawings and photographs. Of the many books about the earthquake and fire of 1906, WILLIAM BRONSON, The Earth Shook, the Sky Burned (1959), is a first-rate work of historiThe discovery of gold

cal reconstruction. The growth of San Francisco is treated in GUNTHER BARTH, Instant Cities: Urbanization and the Rise of San Francisco and Denver (1975); JOHN B. MCGLOIN, San Francisco: The Story of a City (1978), is a popular history; and FREDERICK M. WIRT, Power in the City: Decision Making in San Francisco (1974, reissued 1978), is a study of local politics. The WRITERS' PROGRAM, CALIFORNIA, San Francisco: The Bay and Its Cities, new rev. ed. (1973), is a popular city guide; San Francisco Bay (1957), written by the naturalist-conservationist HAROLD GILLIAM, is both authoritative and evocative; and MELLIER G. SCOTT. The San Francisco Bay Area: A Metropolis in Perspective (1959), is a good systematic description of the metropolitan area. See also GLADYS HANSEN, San Francisco Almanac: Everything You Wanted to Know About the City (1980); and LAWRENCE FERLINGHETTI and NANCY J. PETERS, Literary San Francisco: A Pictorial History from the Beginnings to the Present Day (1980).

(K.La./G.C.Ha.)

São Paulo

he largest city of Brazil and dynamic capital of the state of the same name, São Paulo is the foremost industrial centre in Latin America. With one of the world's fastest growing metropolitan populations, it is also the largest city of the Southern Hemisphere and one of the largest conurbations in the world. Sometimes called the "locomotive that pulls the rest of Brazil," São Paulo has a vibrant and energetic urban core characterized by an ever-growing maze of modern steel, concrete, and glass skyscrapers. The city is located in the hills of the Serra do Mar, which forms part of the Great Escarpment that extends between the Brazilian Highlands and the Atlantic Ocean. It lies about 220 miles (354 kilometres) southwest of Rio de Janeiro and about 30 miles inland from the port of Santos. The city's name derives from its having been founded by Jesuit missionaries on January 25, 1554, the anniversary of the conversion of St. Paul.

The article is divided into the following sections:

Physical and human geography 6 The landscape 6 The city site Climate The city plan The people 6 The economy 7 Industry and commerce Transportation Administration and social conditions 8 Government and services Education Cultural life 8 History 8 Bibliography 9

Physical and human geography

THE LANDSCAPE

The city site. The Brazilian Highlands are composed of ancient crystalline rocks, which in the vicinity of São Paulo form a surface of gently rounded hills mantled with a reddish clay soil. Rivers such as the Tietê, on which São Paulo is located, rise near the edge of the Great Escarpment and flow generally westward to the Rio Paraná. In their course, they cross stratified sandstones and limestones overlaying the crystalline base, as well as sheets of volcanic rock that form the Paraná Plateau. Here, there are rapids and waterfalls, as well as dams and reservoirs that supply great quantities of hydroelectric power.

Located at an elevation of 2,690 feet (820 metres) above sea level, the city is surrounded by open country, valleys, and foothills. The higher terrain constitutes the preferred residential areas; the lower parts are on alluvial land along the banks of three rivers (the Tietê, the Pinheiros, and the Tamanduateí), and these are occupied by working-class residences, manufacturing establishments, and commercial enterprises. The area of the city is 576 square miles (1,493 square kilometres), but including suburban communities, such as Santo André, Diadema, São Bernardo do Campo, São Caetano do Sul, Osasco, Guarulhos, Mairiporã, Barueri, Santana do Parnaíba, Franco da Rocha,

and Mogi das Cruzes, metropolitan São Paulo sprawls over an area of 3,070 square miles. Open spaces on the perimeter of the city, where there are clay soils mixed with sandy deposits, are used for intensive market gardening. A forest reserve of about 39 square miles is maintained in the nearby Serra da Cantareira, while the beaches of Santos and Guarujá provide pleasant resort areas.

Climate. The Tropic of Capricorn, at about 23°27' S. passes through São Paulo and roughly marks the boundary between the tropical and temperate areas of South America. Because of its elevation, however, São Paulo enjoys a distinctly temperate climate. July is the coldest month, with an average temperature of 57.9° F (14.4° C) and occasional frost. Warmest is February, which averages 69.1° F (20.6° C). Rainfall is abundant, particularly during the summer season from October through March, averaging 56 inches (1,422 millimetres) per year. Humidity and air pollution combine to form a mist that often hangs over the city.

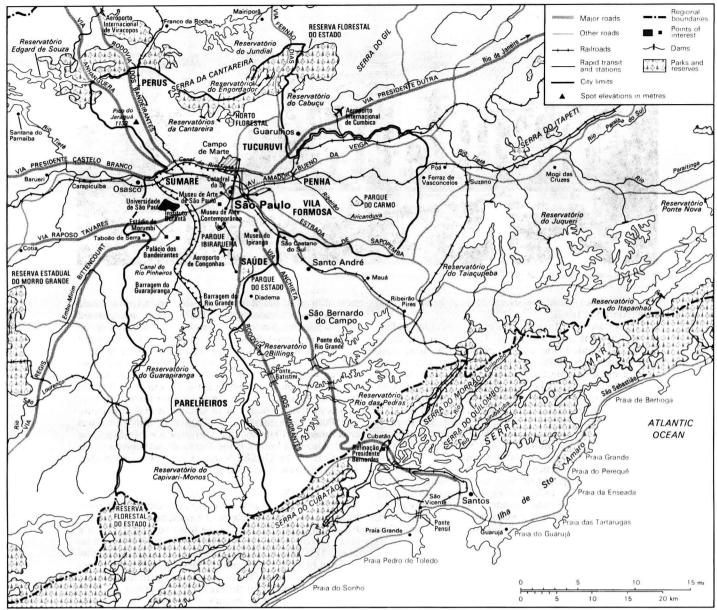
The city plan. The central business district of São Paulo focusses on the famous Triângulo, where the 42story Edificio Itália, inaugurated in 1975, rises to a height of 558 feet. In 1947 there were only three skyscrapers in all of São Paulo, among which the newly constructed, 36-story Banco do Estado de São Paulo was the tallest. Now, the entire city is studded with modern buildings whose construction reflects a variety of architectural styles and materials.

Surrounding the central business district are extensive areas devoted to manufacturing, wholesale and retail trade, and repair and maintenance services. Most extensive are the residential areas characterized by low, red-roofed houses, interspersed with high-rise apartments or office complexes, singly or in clusters. Suburban shopping centres, like suburban neighbourhoods, have become commonplace.

São Paulo had no city plan until 1889, and no zoning law was passed until 1972. Until well into the 19th century, therefore, this state capital retained a colonial aspect, with narrow, unpaved streets, shabby buildings, and old churches and convents of Jesuit and Franciscan styles. Successive city administrations since then have attempted to stimulate more rational urban growth and to modernize the city's transportation system. Projects have included the straightening and rechannelling of the Tietê and Tamanduateí rivers, the widening and relocation of streets and avenues, the development of new parks and lakes, and the construction of superhighways and of a 40mile subway network. Still, the city's street pattern shows little overall coherence, and the problems of intraurban traffic congestion and pollution have reached monumental proportions.

THE PEOPLE

The original settlers of São Paulo were relatively poor and largely from southern Portugal. They were, however, a restless people who sought actively to improve their status in life. Among them were the bandeirantes ("explorers") who formed expeditions that pushed far into the interior of South America in search of slaves and mineral wealth and, in the process, expanded the frontiers of what has become modern-day Brazil.



São Paulo metropolitan area.

With the great expansion of coffee cultivation in São Paulo state after 1880 came a massive immigration of Europeans. Italians and Portuguese were the most numerous, but there were also many Spaniards, Germans, and eastern Europeans. Other settlers came from Japan and the Middle East. Today, there are more Japanese in São Paulo than in any other community outside Japan, and Japanese farmers supply much of the city's market for fruit and vegetables. Even more numerous are internal migrants, primarily from the Northeast of Brazil. These include many blacks, who are the descendants of African slaves. Overall, the population is more than half European and about one-third black and mulatto, with the remainder made up of small groups of Asians and others. Roman Catholicism is the near-universal religion, and the archdiocese of São Paulo is the world's largest in number of adherents. Various other religions are represented by smaller numbers, and many Paulistas, as the inhabitants of the city are known, also attend the rites of local cults. Portuguese is the predominant language, although other languages are commonly spoken.

THE ECONOMY

Industry and commerce. Industrial development, beginning in the late 19th century, but especially since World War II, has transformed metropolitan São Paulo into the

foremost industrial centre in Latin America. This city has often been referred to as the "Chicago of South America," but it actually is a leader of Brazilian commerce and industry to a much greater degree than is Chicago in the United States. The value of its industrial production is by far the country's largest. Its leading industries produce textiles, mechanical and electrical appliances, furniture, foodstuffs, and chemical and pharmaceutical products. There are also heavy metallurgical plants located at nearby Taubaté, oil refineries and chemical plants at Cubatão, and plants manufacturing motor vehicles and farm machinery in São Bernardo do Campo, Santo André, and other suburban communities. The several thousand manufacturing establishments in São Paulo provide employment for some 15 percent of the population. Despite its rapid growth in recent decades, however, the industrial sector has been able to absorb only a small fraction of the growing labour force. Hence, unemployment and underemployment are continuing problems.

Commerce, both wholesale and retail, is well developed and is spread over the city by zones according to specialty. Banks are concentrated in the central Triângulo of the city but maintain branches in almost every district. In addition to important Brazilian banks, there are banking institutions representing interests in North and South America, Europe, Asia, and Africa. No less important, in



Museu Paulista da Universidade de São Paulo (Paulista Museum) in São Paulo.

terms of employment, are street vending, peddling, and neighbourhood stores.

Transportation. Major arteries of transportation radiate in all directions from São Paulo. Three major airports-Congonhas within the city, Cumbicas 15 miles east, and Viracopos 60 miles northwest-together with several smaller ones, provide São Paulo with both international and domestic service. The Viação Aérea São Paulo (VASP), with headquarters in the city, is Brazil's second largest airline and is owned by São Paulo state. Marine transport is provided through the port of Santos. São Paulo is also a hub of railroads, which include a transcontinental line from Santos to Antofagasta, Chile. Modern highways connect with inland cities, Santos, and Rio de Janeiro, and almost all the states of Brazil. Within the city, the first freeway was opened in 1969, and the subway system was inaugurated in 1976. Automobile traffic in the city and suburbs is heavy, and, despite street and highway improvements, congestion is a major and growing problem, which adds to the industrial city's serious conditions of air and noise pollution.

ADMINISTRATION AND SOCIAL CONDITIONS

Government and services. São Paulo is governed by a mayor and city council. It is also the seat of state government, headquartered in the Palácio dos Bandeirantes in the southwestern district (neighbourhood) of Morumbi. In addition to the state offices and departments that have headquarters in the capital, many branches of the federal government are represented there. More than 50 consulates represent countries in the Americas, Europe, Asia, and Africa.

The city has built a chain of reservoirs, tunnels, and canals to supply fresh water to an urban population that it is estimated may top 20,000,000 by the year 2000. The Cantareira water supply project, begun in 1969, increased water supplies greatly, but demand from the burgeoning population continuously outstrips supply. Pollution is an ever-present danger because of the slowdown of dammed streams that carry industrial waste. Electricity has been available in abundance since 1900. First, the waters of the Rio Tietê were dammed and dropped through pensocks from the Great Escarpment to generators below. Subsequently, dams on many rivers to the west, including Itaipú, a joint project with Paraguay, have been built to sustain the city's industries and residential districts.

Public and private health facilities are numerous, including hospitals for civil servants, maternity hospitals, and hospitals specializing in the treatment of cancer, tuberculosis, and other diseases.

Education. São Paulo has a well-developed system of primary and secondary education, both public and private, and a variety of vocational-technical schools. Among the institutions of higher education the largest and most es-

teemed in all of Brazil is the state-supported Universidade de São Paulo, established in 1934, which incorporated the historic Faculdade de Direito (College of Law) in the old São Francisco Square and preexisting polytechnical schools, as well as schools of pharmacy, dentistry, agriculture, and medicine. Economics, architecture, and engineering were added later. Affiliated institutions include a school of sociology and politics, founded in 1933, and the Instituto Butantã, a world-famous centre for research on snakes and the production of antitoxins and antivenins. The Pontificia Universidade Católica de São Paulo was established in 1946 and the Universidade Mackenzie in 1952. Also well known is the Escola de Administração de Emprêsas of the Getúlio Vargas Foundation, established after World War II to train administrators.

CULTURAL LIFE

São Paulo early became a prominent cultural and intellectual centre, due largely to the opening in 1827 of the Faculdade de Direito, one of the first two in Brazil, where many of the nation's most eminent leaders were educated. The Instituto Histórico e Geográfico de São Paulo, founded in 1894, is one of the oldest cultural associations in the state. The city is also a leading centre for libraries, publishing houses, and theatres. The municipal library is housed in one of São Paulo's skyscrapers. In 1922 São Paulo's Modern Art Week, celebrated by a group of young writers, artists, and musicians in the Teatro Municipal, introduced modernism in the arts of Brazil. The Museu de Arte de São Paulo, founded in 1947, is perhaps the best in South America, and the Museu de Arte Contemporânea is also outstanding. São Paulo's symphony orchestra is similarly advanced in the field of music.

Publishing and broadcasting have long been established in São Paulo. Several of the nation's largest and most influential newspapers are published in the city, including O Estado de São Paulo and the Diário Popular, both more than 100 years old. Television was introduced in 1950, and the city is headquarters for some of the most important Latin-American radio stations.

The Paulistas are noted for their enthusiasm in sports. Soccer is the predominant sports attraction, as evidenced by the 150,000-seat Morumbi stadium and the Pacaembu stadium, which seats 70,000. Also popular are swimming, tennis, volleyball, basketball, and auto racing, for which São Paulo has one of the world's largest tracks, at Indianópolis on the city's south side. There are also countless parks, plazas, and playgrounds. The São Paulo zoo, with 3,500 animals, is the largest in Latin America.

History

São Paulo was the first highland settlement established in Brazil. It began as a small Indian settlement in 1554 under the direction of Portuguese Jesuit missionaries and occupied the lower terraces of the Rio Tietê in the midst of tall grasses and scattered scrub trees. The community grew slowly and had only 300 inhabitants by the end of the 16th century. Yet, São Paulo became a township in 1560 and had a town council that could enact and enforce laws. In 1683 it succeeded São Vicente as seat of the captaincy, or hereditary fief, and the inhabitants already had become known as Paulistanos or Paulistas.

Throughout the 17th century São Paulo was a base for expeditions (bandeiras) of armed pioneers (bandeirantes) who penetrated the remote hinterlands in search of Indian slaves, gold, silver, and diamonds. In the process they expanded the frontiers of what was to become modern-day Brazil. In 1711 São Paulo attained the status of a city, yet it remained an agrarian town that had yet to experience

any significant prosperity.

Brazil's independence was declared on September 7, 1822, by Dom Pedro I, the Portuguese emperor in Brazil, at a site in São Paulo marked by the museum and monument of Ipiranga. Nevertheless, São Paulo continued to retain its colonial character until the latter part of the 19th century. Then, rather suddenly, coffee cultivation spread across the state of São Paulo, providing employment for many of the European and other immigrants who began arriving in great numbers. Included were Italians (who came to outnumber native Brazilians), Portuguese, Spaniards, Germans, eastern Europeans, Syrians, Lebanese, and Japanese. An era that was to transform São Paulo into a modern world-class city had begun.

Between 1885 and 1900 the São Paulo region was transformed from an isolated frontier to a new and independent region that focussed on the city of São Paulo and the port of Santos. With the spread of coffee, the major centre of urban activities was shifted to São Paulo, and the growth of the city was spectacular. New industries by

1905 included textile mills, shoe factories, and others using local raw materials. Cotton textile mills alone employed 39 000 workers

In the late 19th century São Paulo had only one-tenth the population of Rio de Janeiro; by 1970 it had become the largest city in Brazil and one of the largest in the world. It included almost one-half of the population of São Paulo state, Brazil's most populous political subdivision, and accounted for about one-third of the nation's total industrial employment, and both proportions have continued to grow. Immigrants were pouring into the city at a rate of 300,000 per year, especially from the impoverished Northeast. São Paulo is a dynamic city, and continuous progress and official estimates indicate that by the year 2000 São Paulo will have surpassed Shanghai in population and will be the second largest urban agglomeration in the world, surpassed only by Mexico City.

BIBLIOGRAPHY. STEFAN GEYERHAHN (ed.), São Paulo, trans. from the Portuguese (1977), is a picture book and general description; BENEDITO LIMA DE TOLEDO, São Paulo: Três Cidades em um Século (1981), describes architecture, urban evolution, and history; N. LECOCQ MÜLLER, "Demographic Growth and Urban Expansion in the Metropolitan Area of São Paulo,' Revista Geográfica (1983), is an informative study; JOSEPH L. LOVE, São Paulo in the Brazilian Federation: 1889-1937 (1980), is a study of the state's geography, population, local politics, and economy; JOHN D. WIRTH and ROBERT L. JONES (eds.), Manchester and São Paulo: Problems of Rapid Urban Growth (1978), focusses on the economic conditions of the city; VINOD THOMAS, Pollution Control in São Paulo: Costs. Benefits, and Effects on Industrial Location (1981), studies one of the city's major problems; PAULO CURSINO DE MOURA, São Paulo de Outrora: Evocações de Metrópole (1980), is a history of the streets of the city; and ERNANI SILVA BRUNO, História e Tradições de Cidade de São Paulo, 3 vol., 2nd ed. (1954), is a general history of the city.

(A.Le./C.W.M.)

Scandinavian Literature

Scandinavian literature consists of those writings in the North Germanic group of the Germanic languages, the modern forms of which include Swedish, Norwegian, Icelandic, Danish, and Faeroese. The literary works written in these languages, though manifesting certain differences reflective of distinct national institutions, exhibit strong similarities stemming from deep-seated common linguistic and cultural ties. Some authorities include Finland among the Scandinavian countries on geographical

and economic grounds, but the literature of the Finnish-speaking people, like their language, stands apart in a number of respects. (Finnish belongs to the Baltic-Finnic branch of the Finno-Ugric language family and is most closely related to Estonian, Livonian, Votic, and Karelian.) The present article does, however, devote some attention to various notable Finnish authors who wrote in Swedish. (Ed.)

The article is divided into the following sections:

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The impact of the Reformation on Swedish letters 13 Developments in Danish literature 13 Icelandic learning and literature 13 The 17th century 13 Swedish poetry and prose 13 The literary Renaissance in Denmark 13 Renewed literary activity in Norway 14 Icelandic letters 14 The 18th century 14 Swedish Classicism and Enlightenment 14 Literary activity in Denmark, Norway, and Iceland 14 The 19th century 15 Swedish literature 15 Romanticism Emergence of Realism and Poetic Realism Sources of modern Swedish literature Finno-Swedish literature

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The Middle Ages

The literature of Scandinavia and, in particular, of Iceland has reflected two extraordinary features of the social and cultural history of pagan Europe and of Iceland. The way in which names such as Siegfried, Brunhild, and Attila cropped up again and again in different European literatures has borne witness to the dissemination of legends and traditions common to the early Germanic tribes of Europe, starting from the great movements westward in the 4th, 5th, and 6th centuries. The literature of Iceland provides not only the most detailed descriptions available of the life-style of early Germanic peoples but constitutes the most complete account of their literature and literary traditions. Although the sagas and poems were first written down by Christian scribes, they present a picture of a pre-Christian European culture that reached its heights in the new settlements in Iceland.

A second feature directly concerns the peoples of Scandinavia. A remarkable characteristic of Scandinavian literature was the accuracy with which it described the geography of northern Europe, accuracy that was born of actual knowledge. From the late 8th century until well into the Middle Ages, the history of the Norsemen was one of unceasing movement toward western and central Europe. The Norsemen discovered Iceland, as early Icelandic historians had it, when their ships were blown off course about 860. The next century found the Vikings pushing west by way of Britain, Ireland, and France to Spain and then through the Mediterranean to North Africa and east to Arabia. Across land they reached the Black Sea, by sailing north they came to the White Sea, and finally, turning westward again, they reached America long before Columbus.

NORWEGIAN AND ICELANDIC LITERATURE

The roots of Norwegian literature reach back more than 1,000 years and become inextricably intertwined with early Icelandic literature. Although a large part of this early literature was composed either in Iceland or elsewhere in Scandinavia by Icelanders, the Norwegian element in it is considerable and indisputable, even though this cannot always be isolated and defined. In many instances, it is obvious that some of the literature derives from a time before the Scandinavian settlement of Iceland in the 9th century. In other cases, it appears that the composers of the works had resided for long periods in the mother country of Norway.

The classical period in Iceland. The best known Icelandic literature belongs to the classical period, roughly equivalent to the early and medieval periods in western European literature. Icelandic manuscripts yield much knowledge of European myth and legend, which is in part common to all Germanic peoples. Stories of the Norse gods and myths—of Odin, god of war; Balder the Beautiful; Thor, god of thunder; and Valhalla, hall of the slain—form the nucleus of early Icelandic literature.

Almost all extant early Scandinavian poetry was recorded in Icelandic manuscripts, although some was clearly composed before the Scandinavian peoples reached Iceland in the late 9th century. Much of the oldest poetry was recorded in the Codex Regius manuscript, which contained the Sæmundar Edda (c. 1270), commonly designated by scholars as the Poetic Edda, or Elder Edda. The poetry is sometimes called Eddaic and falls into two sections: heroic lays, which, broadly speaking, dealt with the world of men; and mythological lays, which dealt with the world of the gods.

The heroic lays. The heroic lays followed the mytho-

Eddaic poetry

logical in the Codex Regius and were probably the earlier of the two. Many of the legends on which they were based originated in Germany or even among the Goths. Oldest of all was perhaps the Hamdismál ("Lay of Hamdir"), which forcefully expressed the heroic ideals of Germanic tribal life. The story closely resembled one told by Jordanes, a Gothic historian of the mid-6th century, and his account suggested that his source was an even earlier poem about Hamdir. Another of the older lays in the Poetic Edda was the Atlakvida ("Lay of Atli"), which referred to events that took place in 5th-century western Germany, Atli (or Attila) being king of the Huns from 434 to 453. Nearly all heroic lays were associated with the story of Sigurd (or Siegfried), the valiant hero, and his ill-fated love for Brunhild, who, too, figured to varying extent in different lays. Many scholars hold that the lays concerned with the spiritual conflict of the heroines Brunhild and Gudrun, which tend to be romantic and sentimental, were later compositions than the austere heroic lays. The Poetic Edda contained only a small portion of the poetry known in Iceland in the Middle Ages and now lost. Fragments of ancient lays appeared in 13th- and 14th-century sagas such as the Hlödskvida ("Lay of Hlöd") in the Heidreks saga, as did mention of Danish and Swedish heroes in some fragments that must also have been known to the author of the Old English epic poem Beowulf.

The mythological lays. Mythological lays about the Norse gods made up the first half of the Poetic Edda. It is unlikely that any of these originated outside Norway, Iceland, and Norse colonies in the British Isles. The Völuspá ("Sibyl's Prophecy") was a striking poem on the history of the world of gods, men, and monsters, from the beginning until the "twilight of the gods." Many passages in the poem are obscure, but most modern scholars agree that it was composed in Iceland about the year 1000, when the people were turning from the old religion to the new. An interesting story of the gods was told in the Skírnismál ("Words of Skirnir"): sitting in "Gate Tower," throne of Odin, the god Freyr, lord of the world, gazes into the world of giants and falls in love with a giant maiden; to win her, he sends his messenger Skírnir, who first offers gifts and then threatens the maiden until she agrees to make a tryst with Freyr. Scholars have seen an ancient fertility myth in this story, and it was certainly one of the older mythological poems in the *Poetic Edda* and probably originated in Norway before Iceland was settled by Norwegians.

The mythological poems so far mentioned were all narrative, but many of those in the Poetic Edda were didactic. The Hávamál ("Words of the High One"; i.e., Odin) consisted of fragments of at least six poems. In the first section, the god speaks of relations between man and man and lays down rules of social conduct; in other sections he discourses on relations between men and women and tells how love of women may be lost or won; the last two sections are about runes and magic power. Most of the poems were probably composed in Norway in the 9th and 10th centuries. Another didactic poem, the Vasprúdnir ("Words of Vafthrúdnir"), related a contest between Odin and a giant.

Didactic

element in Eddaic

poetry

Some important mythological lays appeared in other manuscripts. Baldrs draumar ("Balder's Dreams") described how the god Balder dreamed that his life was threatened and how his father, Odin, rode to the grave of a prophetess to force her to reveal the fate in store for Balder.

The Eddaic verse forms. Three metres are commonly distinguished in Eddaic poetry: the epic measure, the speech measure, and the song measure. Most narrative poems were in the first measure, which consisted of short lines of two beats joined in pairs by alliteration. The number of weakly stressed syllables might vary, but the total number of syllables in the line was rarely fewer than four. In these respects it resembled the measure used by Anglo-Saxon and early Germanic poets. The speech measure used in the Atlamál ("Words of Atli") differed little from the epic measure, though its lines usually had a greater number of weakly stressed syllables. The song measure was the most irregular of the Eddaic verse forms. It was chiefly in didactic poems and generally consisted of stro-

phes of six lines divided into half strophes of three lines. Skaldic verse. Norwegians and Icelanders of the 9th to the 13th century also composed skaldic poetry (from the Icelandic word skáld, "poet"). It was not composed in the free variable metres of the Poetic Edda but was strictly syllabic: every syllable had to be counted and every line had to end in a given form. Like Eddaic lines, the skaldic lines were joined in pairs by alliteration, often using internal rhyme or consonance; but this poetry differed in syntax and choice of expression. Word order is freer than in Eddaic poetry, and a highly specialized poetic vocabulary employed periphrases, or kennings, of such complexity that the poetry resembles riddles. Little is known about skaldic verse forms, but they are thought to have been developed in Norway during the 9th century and could have been influenced by the forms and diction of Irish poets of the period. The earliest known poet was Bragi the Old, who probably wrote in Norway in the latter half of the 9th century. Harald I (died c. 940) of Norway was eulogized by several poets, among them Thörbjörn Hornklofi, whose poem the Haraldskvaedi ("Lay of Harald") was partly Eddaic and partly skaldic in style.

The distinction between Icelandic and Norwegian literature at this period is difficult to make. Skaldic verse seems to have originated in Norway and to have been developed by Icelandic poets who either, like Egill Skallagrimsson, spent much time in Norway or wrote in praise of Norwegian kings, as did Sigvatr, counsellor and court poet of Olaf II of Norway. Although its complexity means that skaldic poetry is now less appreciated than it deserves, the orally transmitted poems of the 10th and 11th centuries were valuable sources for Icelandic historians in the fol-

lowing centuries.

Prose. Iceland's adoption of Christianity in 1000 opened the way for powerful influences from western Europe. Missionaries taught Icelanders the Latin alphabet, and they soon began to study in the great schools of Europe. One of the first was Ísleifr, who after being educated and ordained as a priest was consecrated bishop. His school at Skálholt in southern Iceland was for many centuries the chief bishopric and a main centre of learning. The earliest remembered historian was Saemundr the Wise, but Ari Thorgilsson is regarded as the father of historiography in the vernacular. A short history, *Islendingabók* (or *Li*bellus Islandorum, c. 1125; The Book of the Icelanders), and the more detailed Landnámabók ("Book of Settlements") are associated with his name. Extant works of the period are few or anonymous. Annals of contemporary events date from the 13th century and the oldest religious manuscripts, consisting of homilies and saints' lives, from c. 1150. Larger collections of religious literature appeared in late 12th- and early 13th-century manuscripts. As elsewhere, the most popular books were often lives of the Apostles and saints.

The sagas. The word saga is used in Icelandic for any kind of story or history, whether written or oral. In English it is used to refer to the biographies of a hero or group of heroes written in Iceland between the 12th and 15th centuries. These heroes were most often kings of Norway, early founders of Iceland, or legendary Germanic figures of the 4th to the 8th century. The oldest saga is the fragmentary Oldest Ólafs saga helga ("First Saga of St. Olaf"). written about 1180. In form it is a hagiographic narrative, laying emphasis on miracles worked through the agency of the saint. It was probably written in the monastery of Thingeyrar, which played an important part in cultural life in the late 12th and early 13th centuries.

Several sagas about King Olaf Tryggvason, at whose instigation the Icelanders adopted Christianity, were also written at Thingeyrar, where the work of the monks was fanciful rather than realistic. A more critical style of history was established in the south by Saemundr and Ari, and several notable works were written at Skálholt or nearby in the 13th century, such as the Hungrvaka ("The Appetizer"), a short history of the bishops of Skálholt from Isleifr to Kloengr. In the late 12th century several short histories of Norwegian kings were brought from Norway to Iceland, where they influenced Icelandic historians. The Agrib, a summary of the histories, or sagas,

Characteristics of skaldic poetry

Influence of Christian missionaries on Iceland

of Norwegian kings, written in the vernacular in Norway. was particularly influential. The Fagrskinna ("Fine Skin") covered the same period in more detail, while the Morkinskinna ("Rotten Skin"), probably written earlier, covered the period from Magnús the Good (1035-47) to the late 12th century.

The role of Snorri Sturluson

The saga

of Njáll

Gunnar

and

Snorri Sturluson wrote many kinds of works and played an important role in political wrangles in his time. Among works ascribed to him was the Snorra Edda (c. 1225), a handbook of prosody and poetic diction commonly referred to as the Prose Edda, or Younger Edda. He twice visited Norway, and a large part of his work consisted of lives of its early kings: he combined his Olafs saga with lives of other Norwegian kings to form the Heimskringla (c. 1220; "Orb of the World"). The value of these as historical sources has long been debated. Snorri was certainly well read in vernacular history and attempted to write faithful accounts of what he had read in earlier records. He did not aim to write scientific history; his work was creative and therefore portrayed his heroes imaginatively. The stirring Egils saga (on the skald Egill Skallagrimsson) is attributed to Snorri.

The Icelanders', or family, sagas. These sagas were about heroes who had supposedly lived in the 10th and 11th centuries. Their origins are unclear, and it is debatable whether they were faithful records of history. One theory is that they were composed in the 11th century and transmitted orally until written down in the 13th century: though researchers now reject this view, it is true that the sagas owed much to oral tales and the tradition of oral verse. Their historicity is difficult to verify, since their content and form were shaped both by the sources used and by the author's intentions.

It is also difficult to determine the date of many of the sagas. The obviously early works were somewhat crudely structured and expressed Norse ideals of loyalty and heroism. The Gisla saga, written before the middle of the 13th century, showed a development of artistic skill and contained rich descriptions of nature and verses of considerable beauty and tragic feeling. The Laxdaela saga ("Saga of the Men of Laxárdal"), written a few years later, was a delicately worked tragedy in which the author showed an unusual appreciation of visual beauty. One work that was clearly the author's creation was the Hrafnkels saga Freysgoda ("Saga of Hrafnkell, Freyr's Priest"): despite realistic detail, the saga contained little historical fact. As the century progressed, a taste for fantastic and romantic elements grew. The Grettis saga ("Saga of Grettir the Strong") included several motifs from folklore and portrayed a hero fighting against trolls and ghosts.

The greatest of Icelanders' sagas, the Njáls saga, had in fact two heroes, Njáll and Gunnar. Gunnar is young and inexperienced and Njáll is a wise and prudent man endowed with prophetic gifts; he embodies traditional Norse ideals of loyalty and bravery, yet faces his death by burning with the resignation of a Christian martyr.

The heroic sagas. The fantastic element was further developed in the fornaldar sögur, literally "the sagas of antiquity," whose heroes were supposed to have lived in Scandinavia and Germany before Iceland was settled. The best known, the Völsunga saga (c. 1270), retold in prose stories from heroic lays of Sigurd, the Burgundians, and Jörmunrekr, and the Hrólfs saga kraka (c. 1280-1350) incorporated ancient traditions about Danish and Swedish heroes who also appeared in the Old English poems "Widsith" and Beowulf.

Many of the works on contemporary history were combined about 1300 in the Sturlunga saga, including the Islendinga saga by Sturla Thórdarson.

Translations from Latin. A quantity of secular literature was translated from Latin between the 12th and 14th centuries. The "Prophecies of Merlin," already translated in verse by a Thingeyrar monk, were combined with a complete translation of Geoffrey of Monmouth's history and titled Breta sögur ("Stories of the Britons"). In one 14th-century manuscript this was preceded by the Trójumanna saga ("Story of the Trojans"), translated from Dares Phrygius. A Norwegian translation of the Bible was begun in the reign of Haakon V Magnusson (1299-1319).

Romances. Romances were also translated or adapted from continental romances. Interest in romance began in Norway and soon took root in Iceland. The earliest romance was probably the Tristrams saga (1226), derived from the Anglo-Norman poet Thomas. This was followed by the Karlamagnús saga ("Saga of Charlemagne"), a collection of prose renderings of French chansons de geste, including a Norse version of the Chanson de Roland. Romances in Icelandic were numerous, and their effect on the style of later writers is evident in such sagas as the Laxdaela saga and Grettis saga.

Post-classical literature in Iceland. In the period following the classical age, little was written that attracted attention outside Iceland. Realism and detached objectivity declined, and sentimentality and fantasy gained the upper hand. The decline in literary standards is sometimes attributed to Iceland's loss of independence in 1262 and the changes that followed. Interest in earlier manuscripts continued, and many 14th- and 15th-century manuscript collections of 13th-century material were made. The most beautiful of all Icelandic manuscripts, the Flateyjarbók (c. 1390), included versions of sagas of Olaf Tryggvason and St. Olaf, together with texts from other sagas or about heroes associated with Iceland.

Prose. Prose literature of the 14th century included several sagas. Among them were the Finnboga saga ramma "Saga of Finnbogi the Strong"), about a 10th-century hero, and another telling the love story of its hero Víglundr. Sagas about bishops, already a theme in the 13th century, became more numerous, as did lives of foreign saints. A large collection of exempla (moral tales) was also made, each short tale illustrating some moral precept.

Poetry. Much poetry was written up to the time of the Reformation, and many new forms were devised. The best poems were religious pieces, in honour of the Virgin, the Apostles, or other saints. The well-known Lilja (c. 1350; "The Lily") by Eysteinn Asgrimsson, a monk from Thykkvabaer, gave an account of the fall of Satan, the creation, the first sin, and the birth, life, and Passion of Christ. The term rímur—rhymes—is used of the narrative poetry developed after 1500 that consisted of mainly fourline strophes: the lines had end rhyme. The metrical forms, although apparently derived from Latin hymns, inherited the alliterative system of earlier poetry. Ballads written in Icelandic never attained the popularity of Danish ballads in Denmark nor achieved the high standard of the Norwegian Draumkvaede ("Dream Ballad"). Most of those preserved dated from the 14th to the 16th century and were free translations of Danish and Norwegian originals.

SWEDISH LITERATURE

Swedish literature proper began in the late Middle Ages when, after a long period of linguistic change, Old Swedish emerged as a separate language. The foundations of a native literature were established in the 13th century. The oldest extant manuscript in Old Swedish was the Västgötalagan ("Law of West Gotland"), part of a legal code compiled in the 1220s. These legal documents often employed concrete images, alliteration, and a solemn prose rhythm suited to their proclamatory nature.

The poetry of chivalry was first represented in Eufemiavisorna ("The Songs of Euphemia"), written in doggerel between 1303 and 1312, which included a translation of Chrétien de Troyes' romance Yvain. Anonymous ballads probably dating from the 14th and 15th centuries also reflected a new interest in romance. These ballads, though mostly derived from foreign sources and combining the imported ideals of courtly love with native, pagan themes and historical events, formed the most accessible genre of what can be called Swedish medieval literature.

DANISH LITERATURE

Denmark's first literature appeared in the runic inscriptions scratched on stone or carved in metal, mainly epitaphs of warriors, kings, and priests that occasionally had short, unrhymed alliterative verses in the Viking spirit. Runic inscriptions were used in Denmark from about 250, but most of those preserved date from 800 to 1100. With the introduction of Christianity, Latin became the

Decline in literary standards

Ásgrímsson's Lilja

Early Swedish ballads

predominant literary language, and Denmark's first important contribution to world literature, Saxo Grammaticus' Gesta Danorum (written between 1185 and 1222; "The Deeds of the Danes"), which contained, for example, the Hamlet story, was written in Latin. The medieval ballads of Denmark are among the most important in Europe; 539 are known in more than 3,000 versions, but nearly all were written down after the end of the Middle Ages, the first printed edition appearing in 1591.

The 16th century

THE IMPACT OF THE REFORMATION

ON SWEDISH LETTERS

The

Swedish

of the

Bible

translation

Two dates mark the beginning of modern Swedish history: 1523—the breach with Denmark and Gustav I Vasa's accession; and 1527—the breach with Rome and the establishment of a national Lutheran Church. The political revolution that eventually brought Sweden to the position of a European power had no considerable effect on literature until a century later, but the Reformation wholly dominated Swedish letters in the 1500s.

The most important literary event of this period was the translation of the Bible in 1541, which inaugurated modern Swedish and provided an inexhaustible source for poets of subsequent times. Closely involved in the Bible translation were the apostles of the Swedish Reformation, Olaus Petri and his brother Laurentius. Olaus Petri's vigorous approach was revealed in his published sermons and in a Swedish chronicle, the first historical Swedish work based on critical research. Olaus Petri may also have written the biblical Tobie comedia (published 1550), the first complete extant Swedish play.

As a consequence of the Reformation, two of Sweden's most distinguished scholars of the period, Johannes Magnus and his brother Olaus, were driven into exile. In his history of all the kings of the Goths and Swedes, Johannes provided Sweden with a number of valiant kings unknown to critical historians. Olaus wrote the first geographical and ethnographical account of Scandinavia, Historia de gentibus septentrionalibus (1555; "History of the Northern Peoples").

DEVELOPMENTS IN DANISH LITERATURE

In 1536 the Lutheran Reformation was carried through in Denmark, and the beginning of the 16th century was characterized by many pamphlets for or against the Roman Catholic Church. European humanism and the Renaissance made their influence felt also in Denmark, where Christiern Pedersen was the most prominent humanist who supported the Reformation. He edited Gesta Danorum by the 13th-century historian Saxo Grammaticus, translated the New Testament, adapted Martin Luther's pamphlets into Danish, and participated in a translation of the Bible (1550). Poul Helgesen was the most gifted opponent of the Lutheran Reformation and Hans Tausen its most talented spokesman. The Visitation Book by the Lutheran bishop Peder Palladius is an important literary document. The two most important historians were Anders Sørensen Vedel and Arild Huitfeldt.

Sixteenth-century Danish poetry was religious or polemical, with fine love poetry and hymns. The earliest plays date from the beginning of the century. The most important playwright of the period was Hieronymus Justesen Ranch, whose farce Karrig Nidding ("The Miserly Rascal") was his best play.

ICELANDIC LEARNING AND LITERATURE

The chief political figure and poet of the Reformation was Jón Arason, last Catholic bishop of Hólar, beheaded in 1550. By his life Jon showed that he was a Viking as well as a martyr, although most of his surviving poetry is religious.

The impact of the Reformation

The effect of the Reformation on Icelandic learning and literature was that Catholic poetry was discarded and attempts were made by the first Lutheran bishops to replace it with hymns poorly translated from Danish and German. Lutheran teachers instructed the people in Protestant dogma, and several translations of sermons and books of instruction by German Lutherans were printed in Icelandic from as early as 1540. Gudbrandur Thorláksson was the most energetic of the Lutheran teachers. In translating the Bible he used earlier Icelandic versions of some books of the Old Testament and Oddur Gottskálksson's Icelandic translation of the New Testament. In his psalmbook he showed appreciation of Icelandic poetic tradition and adhered to Icelandic alliteration and form.

The 17th century

SWEDISH POETRY AND PROSE

In the first half of the 17th century, Swedish literature remained limited in scope and quantity. A unique contribution, however, was made by Lars Wivallius, whose lyrics revealed a feeling for nature new to Swedish poetry. With its intervention in the Thirty Years' War, Sweden established itself as a European power, and this led to a development of national pride and culture, as revealed in literature of this epoch. The outstanding work was the allegorical epic Hercules (1658) by Georg Stiernhielm, which reflected many of the social and political problems of the time. Stiernhielm's followers included the two brothers Columbus, one of whom, Samuel, wrote Odae sueticae (1674; "Swedish Odes") and the prose Mål-roo eller roomål, a charming collection of anecdotes that illumine Stiernhielm's character. A rival to Stiernhielm was the unidentified "Skogekär Bärgbo," whose Wenerid (1680) was the first sonnet cycle in Swedish.

Stiernhielm aimed at an integration of Sweden's cultural heritage with the accepted ideals of continental classicism. His Hercules is full of old Swedish words that he was eager to revive. Columbus also demanded a more vigorous, flexible language as did "Skogekär Bärgbo" in Thet swenska språkets klagemål (1658; "The Lament of the Swedish Language"). National pride and religious feeling are combined in the works of the bishops Haquin Spegel and Jesper Swedberg, father of the Swedish mystic Emanuel Swedenborg. Spegel contributed to Swedberg's new hymnbook of 1695, which became the poetry book of the Swedish people and was of lasting influence. Even Lucidor was represented in it, giving intense expression to the contrasting moods of the period: in his love songs and, above all, in his drinking songs, he was as pagan and reckless as he was devout in his hymns and funeral poems.

At Uppsala, meanwhile, the scholar Petrus Lagerlöf attempted to impose purer classical standards on native literature, and Olof Verelius edited and translated Icelandic sagas. It was Olof Rudbeck, however, who became interested in Verelius' work and developed a theory that Sweden was the lost Atlantis and had been the cradle of Western civilization. He proposed this idea in Atland eller Manheim (1679-1702), which, translated into Latin as Atlantica, attained European fame.

Baroque and classicist tendencies ran parallel in late 17th-century Swedish literature. Gunno Eurelius (Gunno Dahlstierna) wrote an elaborate epic, Kungaskald ("Hymn to the King"), for King Charles XI's funeral in 1697. Simpler in style was Johan Runius, who expressed a Christian stoicism of the kind found among Swedes during the disastrous early decades of the 18th century. Jacob Frese was a gentler and more intimate poet; his lyrics and hymns contained some of the emotional pietism that became a feature of 18th-century thought.

THE LITERARY RENAISSANCE IN DENMARK

The literary Renaissance reached Denmark in the 1600s, giving rise to a strict adherence to classical patterns and blind belief in authority in political, religious, and literary matters. In religious literature Latin dogmatics and pamphlets reflecting the superstitions of the century were dominant. It was, however, a great era of scholarship. Ole Worm is famous for his book on the runic inscriptions. Monumenta Danica (1643). Thormod Torfaeus and Árni Magnússon introduced the study of Old Norse literature; Peder Hansen Resen edited and translated some of the poetry of the Old Norse Edda; and Erik Pontoppidan and Peder Syv introduced the linguistic study of Danish.

Danish poetry in the 17th century tended to follow the

Georg Stiernhielm and his followers

The revival of interest in Scandinavian antiquity