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"Let knowledge grow from more to more
and thus be human life enriched."

Proboscidea

The order Proboscidea comprises three suborders and about 300 species of terrestrial mammals. All but two species, the Asiatic, or Asian, elephant (*Elephas maximus*) and the African elephant (*Loxodonta africana*), are extinct. The elephants are the largest surviving land animals and, among the mammals, are exceeded only by the whales in size.

The Proboscidea are characterized by columnar limbs, bulky bodies, and elongated snouts. In recent forms, testes are internal. The snout is a long boneless proboscis, or trunk; it is a combination of the upper lips, palate, and nostrils. Some of the incisor teeth develop into tusks. One extinct suborder (Deinotherioidea) lost the upper tusks; certain others have lost the lower ones and evolved upper tusks of dentine from which the enamel has partially or completely disappeared. The canine teeth were generally repressed in all groups, and the cheek teeth developed rows of blunt cones or ridges. In later forms, the temporary teeth were replaced by permanent ones, which are pushed by an escalator-like movement along a horizontal plane, so that the front teeth were replaced by teeth moving forward from the rear. The skull, which originally was elongated, became shorter, higher, and bulkier in later forms. The back of the eye orbit remained open instead of forming a complete bony ring, and the nasal opening in all Proboscidea is at a higher horizontal plane than the eye sockets. The neck shortened as the animals evolved larger, higher bodies and an elongated trunk that also functions as a hand. The skull has enlarged out of proportion to the brain in order to serve as an anchor for the trunk and to support the heavy dentition. This order occurs in all the continents except Australia. Fossils of proboscideans provide valuable information about early humans who were their contemporaries.

Drawing by Christian D. Olsen

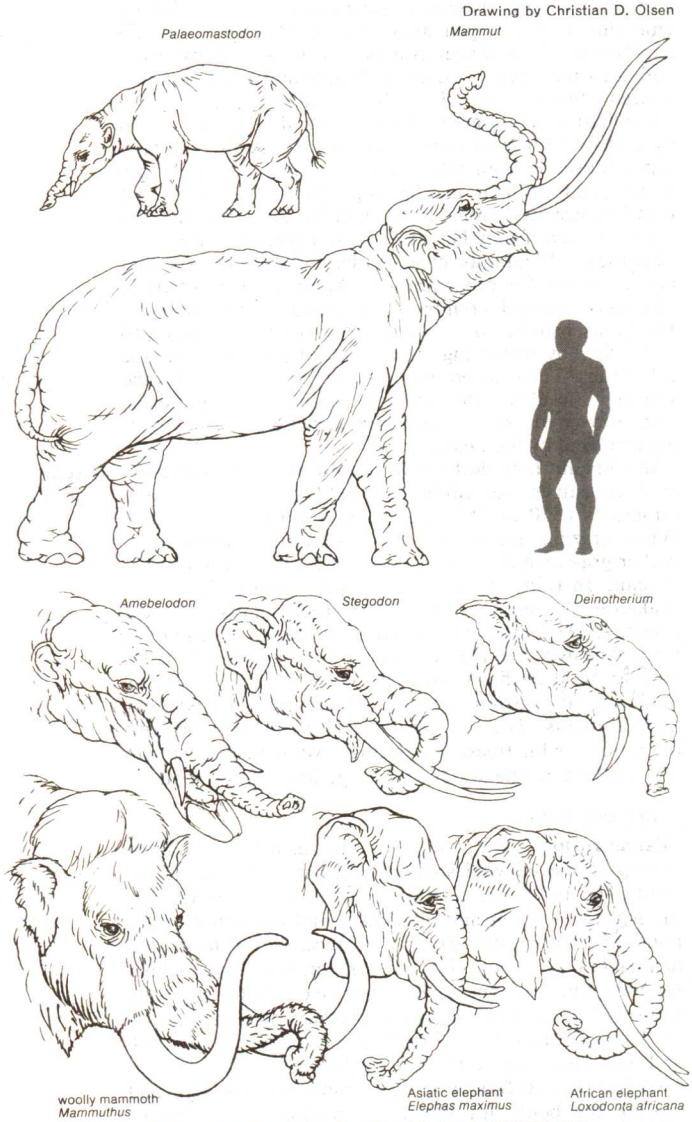

Figure 1: Representative fossil and living proboscideans.

GENERAL FEATURES

Size range and distribution. In Europe, the landmass that broke up to form the islands of the Mediterranean Sea harboured proboscideans. Three fossil species have been found in Malta; one had had a height of 2.1 metres, or 6.9 feet (*Palaeoloxodon mindriensis*), another a height of 1.5 metres, or 4.9 feet (*P. melitensis*), and the third was less than one metre, or about three feet (*P. falconeri*). *P. creticus* of Crete was 1.5 metres, and *P. cypriotis* of Cyprus was 0.9 metre (three feet) in height. In North America, a *Mammuthus* isolated on Santa Rosa Island, off the coast of southern California, was probably derived from *Mammuthus meridionalis,* a species that stood 4.2 metres (13.8 feet) at the shoulders.

Early human records of elephants

Elephas maximus asurus lived in Iran and Syria. Early drawings of the animal and fragmentary skeletal remains indicate that it was the largest subspecies of the Asian elephant. The war elephants employed by Pyrrhus in 255 BC and engraved upon Roman seals show animals of unusual size. "Sarus," which signified "the Syrian," was the outstanding animal in the elephant battle squadron of the Carthaginian general Hannibal. In 1500 BC elephants (*Elephas maximus rubridens*) existed in China as far north as Anyang, in northern Honan Province. Writings from the 14th century state that elephants were still to be found in Kwangsi Province.

Man as well as other environmental factors exterminated the woolly mammoth (*Mammuthus primigenius*) and the imperial mammoth (*M. imperator*) about 10,000 years ago. Several races of the living species of Asian and African elephants also died out by about 1500 BC. The small North African race became extinct by the 2nd century AD, and some of the American mastodons, such as *Cuvieronius postremus* of South America, died out as recently as the 4th century AD. The large African bush elephants (*Loxodonta africana*) were exterminated from the Transvaal in South Africa early in the 20th century, but they still occur over much of the continent south of the Sahara Desert. A smaller elephant inhabits the forests of western equatorial Africa, particularly in the Congo region. It is considered by some to be a subspecies (*Loxodonta africana cyclotis*) of the African elephant; others believe it to be represented by several subspecies; still others consider it to be a separate species (*L. cyclotis*).

In Asia, elephants have been exterminated from Iran, Iraq, Afghanistan, the northwestern part of India, and from much of the Malay Peninsula, Java, and the greater part of Borneo and Sri Lanka (formerly Ceylon). Iso-

lated colonies remain in forest areas of Mysore in the peninsular part of India, in Assam, Nepal, Burma, Malaya, southern China, Sri Lanka, Sumatra, Borneo, and other islands of the East Indies.

Importance to man. Elephants constitute the chief source of commercial ivory. Because of the continuing demand for this commodity, the animals are in danger of extermination. Elephant "pearls" consist of concentric layers of ivory deposited over a foreign object that has been intruded into the soft ivory at the base of the growing tusk. From early times elephants have been used as beasts of burden in India and Burma. Since they do not breed freely in captivity, new stock for domestication is often captured from wild herds. One method is to drive them through a funnel-shaped stockade into a small enclosure; trained tame elephants help to subdue, noose, and train young captives for service. The training and handling of an elephant are usually entrusted to one man, called the mahout in India and the *oozie* in Burma; an elephant and its keeper frequently became inseparable companions.

Capture of elephants

Trained elephants carry humans in a howdah, or miniature hunting lodge, on their backs. They are used to move timber or other heavy materials.

In modern times, African elephants have been trained for labour only since late in the 19th century; however, they were used by the Carthaginians in wars with the Romans. Elephants depicted on Roman medals of the 2nd century AD have heads and bodies of the Asian but ears of the African species. This suggests that both species at that time were tamed. Elephants were used as executioners in Roman amphitheatres and for military pageants. They are still used in exhibitions at circuses, carnivals, and zoological parks. In warfare elephants have been used to drag heavy equipment, especially through mud and up steep slopes. As late as World War II, they were of value in military movements over the mud-clogged roads of Southeast Asia.

The association between man and elephants goes far back into mythology, and a rich folklore has developed. Bracelets of hairs from the tail of a freshly-killed or living elephant are prized as good-luck charms.

Attempts to locate the legendary "graveyards" to which old elephants allegedly resort when near death have been, for the most part, unsuccessful. The groups of buried elephant remains that have been found probably represent sites where elephants drowned in bogs or rivers or perished from imbibing poisonous water.

NATURAL HISTORY

Reproduction and life cycle. Tuskers, or tusked bulls, occasionally fight brief, savage duels that may end in death for the defeated animal. A duel between tuskless elephants may last for days, with occasional periods of rest. The female selected from the herd by the winner often makes an apparent attempt to escape from him. After a brief preliminary courting, the male mounts the female from behind, leaning over her back and either gripping her body or resting his forefeet upon her pelvis, and assumes a standing posture. Copulation lasts for about 20 seconds, with very little movement or noise. Mating continues promiscuously for about two days, after which the most powerful bull drives off the others and remains with the cow for about three weeks. The period of gestation varies from 20 months for a female calf to 22 months for a male. When parturition is about to occur, the herd surrounds the cow, who assumes a squatting position while giving birth.

In regions where large carnivores, such as tigers, prey upon newborn elephants, the cow seeks a female associate. The mother and the other elephants in the herd blow dust upon the moist, newborn calf to dry it. Two hours after birth, the baby is able to stand and is suckled. The mother and calf then join the herd.

Tame cows begin breeding at the age of eight or nine years; tame bulls begin when about 11 or 12 years of age. The interval between the birth of successive calves is about four years. In captivity cows are known to continue bearing calves until 60 or 70 years of age.

The newborn elephant is about one metre (three feet) high and weighs about 90 kilograms (200 pounds). It is covered with yellow and brown hair. After a few months the hair on some parts of the body is as long as that in the extinct mammoth. In *E. maximus* there is also a pinkish patch around each eye, and when the calf is about five months old, a faint whitish patch develops on each cheekbone. As this patch spreads, similar patches appear upon the trunk and ears. In the more easterly races of Malaya and Sumatra there are only a few gray spots. The hoof nails, which are dark at first, gradually become lighter. When the elephant is about eight years old, a thick oily secretion known as musth, or must, begins to flow from a gland in the temporal, or temple, region. It occurs in both sexes, but is more active in males. The secretion increases each year until it drips into the elephant's mouth. Some authorities believe that the function of the secretion is to inhibit feeding; others believe it has some effect on sexual activity.

Appearance of elephant calf

An elephant is not fully grown until it is about 25 years old. In the wild, the average life-span is about 80 years, but under optimum conditions an elephant may live for 120 years.

Behaviour. The organization of an elephant herd is often according to age and sex. In *Elephas*, although herds of 10 or 15 females and their young may appear to be under the leadership of a large female, and their organization matriarchal, young adult males are always in the vicinity, as is the real leader of the entire group, a large male. The leader may be accompanied by one young adult male who acts as a scout, warning the leader of danger. The herd also has a system of scouts, and, before emerging into an open area, one of the scouts usually explores it. If no danger is apparent, he signals by trumpeting to the herd to advance. Individuals often serve as guards while the rest of the herd feeds or bathes.

The herd is held together both by blood relationship and by a strong sense of companionship. If an individual is injured, three or four others surround it, shielding it from danger, supporting it, and helping it to move away. A calf that has lost its mother is adopted by the other cows in the herd even if they have their own calves to raise.

Ecology. Elephants clear paths through forests that are too dense for other animals. Many modern roads in elephant-inhabited countries originated in this manner. Elephants browse to a height of about five metres (16 feet), thereby increasing the amount of sunlight available for shrubs. Their uprooting of grass and roots aerates the soil and stimulates the growth of plants that replace the ones devoured. Mud wallows frequented by elephants are fertilized by their excreta.

An elephant may destroy or discard as much vegetation as it consumes. An adult may eat between 250 to 350 kilograms (550 to 750 pounds) of solid food each day. When grazing, the animal uses its trunk or forefoot to gather grass, which is slapped against a forelimb to rid it of sand. In rainy weather, when soil is more difficult to shake off, the animal browses. Asian elephants break off branches; African elephants are more likely to push over trees. The wood apple (*Feronia elephantorum*) is a favourite food of the Asian elephant. The animal also eats wild rice that grows in forest lakes and various other aquatic plants. The African bush elephant eats the fruit of various palm trees. The spongy wood of the baobab tree provides some water during periods of drought.

Feeding habits

FORM AND FUNCTION

Extant forms. The adult elephant has a tuft of hair at the tip of the tail and sometimes a patch of hair on the head. The limbs are adapted for bearing great weight: the legs are straight and pillar-like, and the bones of the joints are flat at the articular surfaces. Each toe has a heavy hoof nail; the weight is borne on thick pads behind the toes. The nose and upper lip are extended into a long trunk, which contains the nasal passages and has nostrils at the tip. Water for drinking is sucked into the trunk and then discharged directly into the mouth. The trunk is used for placing food into the mouth, for spraying and dusting the body, for lifting or moving heavy objects, and even for throwing objects at man.

The upper second incisors are typically developed into ivory tusks, the longest and heaviest teeth of any living animal. Canine teeth are absent. The complex molars are of the high-crowned type, with transverse rows of enamel ridges on the grinding surface, which is often traversed by a longitudinal median groove. There is normally only one complete functional tooth and half of a second one at a time on each side of each jaw. These are replaced horizontally from the rear as they wear away.

The Asian elephant (*Elephas maximus*) and its races are distinguished from the African elephants by being somewhat smaller and by having relatively small ears with the upper edge curled forward. The head is more domed, is structurally more complex, and has a greater development of diploe, or bony cell cavities. *E. maximus* also has high-crowned teeth and a relatively smooth trunk with a single fingerlike projection at the tip. Adult bulls weigh up to six tons and commonly stand 3.3 metres (10.8 feet) at the withers. Only the males develop tusks, which average 1.5 metres (4.9 feet) in length, the pair weighing about 32 kilograms (71 pounds). These develop flat, longitudinal planes of wear near the tip. Tusks 2.7 metres (8.9 feet) long and 68 kilograms (150 pounds) in weight have been recorded. About 90 percent of the males of the Ceylonese race lack tusks; Sumatran elephants are of slighter build and have longer trunks.

In contrast to the Asian species, the African bush elephant is generally larger. This and the forest form have extremely large ears (one metre in breadth), with the upper edge curled backward, and a roughened, heavily ringed trunk with two projections at the tip. The molars are of coarser construction, have fewer ridges, are less crenulated (scalloped), and consist of a thicker surface of enamel over thick plates of dentine. The top of the head is not domed, and the forehead is more convex. The tusk tips are usually conical, the legs are longer, and the eyes are relatively larger than those of the Asian elephant.

The average height of adult bull bush elephants is 3.3 metres (10.8 feet) at the shoulder, and the average weight is six tons. Cows are about 0.6 metre (two feet) shorter. Both sexes possess tusks, which average about 1.8 metres (5.9 feet) long, the pair weighing 36 to 55 kilograms (79 to 121 pounds). A pair of tusks in the British Museum weighs about 133 kilograms (293 pounds); the larger one of the two is 3.5 metres (11.5 feet) long, with a basal circumference of 46 centimetres (18 inches). The largest elephant on record, a bull bush elephant killed in the Cuando river district of southeastern Angola in 1955, is on display at the Smithsonian Institution in Washington, D.C.; it probably weighed 10 tons when alive and stood four metres (13 feet) at the shoulder. Adult forest elephants are about 2.1 metres (6.9 feet) tall and weigh 1,225 kilograms (2,700 pounds), with slender tusks that are often more than three metres long. The ears are relatively small and smoothly rounded at the margins.

Albinos

Albino, or "white," elephants occasionally occur, especially in Thailand and Burma, where they are regarded by some as semisacred.

The mammoth. The genus *Mammuthus* contains some of the largest members of the family Elephantidae. Certain ones reached a height of over 4.2 metres (13.8 feet) at the shoulders. One was *M. meridionalis* of Asia and Europe, and the other was *M. imperator*, which entered North America during the upper Pleistocene.

The genus also contains one of the most specialized members of the family, the woolly mammoth, *M. primigenius*, which probably became extinct about 10,000 years ago. It inhabited the sub-Arctic area of Asia and Europe and eventually entered North America over the Bering Strait; it travelled southward across western North America almost to Wyoming, then spread eastward toward Lake Michigan. Its height of 3.3 metres (10.8 feet) at the shoulders equalled that of a large *Elephas maximus*, but the body was relatively shorter, and the hindquarters sloped downward. Its skull was compressed from front to back. As an adaptation to its cold environment, the woolly mammoth evolved small ears, a short goatlike tail, and a coat of dense, furry, short hair overlain by longer, bristly hair. It also had a humplike reserve of fat upon the top of the head and on the shoulders. A subcutaneous layer of fat about eight centimetres thick covered the body. The molars had as many as 27 lamellae, or plates. The tusks of the male were about 4.8 metres long. Their almost circular curvature and great size suggest that they may have functioned as shovels for exposing vegetation buried under snow. The mammoth is one of the few extinct proboscideans in which the carcass has often been completely preserved. Among the best known are two from Siberia—one discovered near the mouth of the Lena River in 1804; the other in the bank of the Beresovka River in 1900.

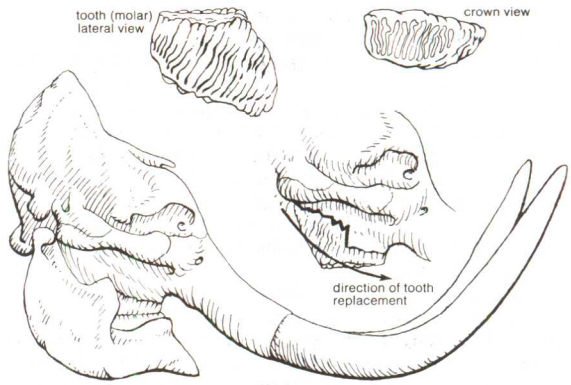

Figure 2: Skull and tooth movement in a mammoth (*Mammuthus primigenius*).

EVOLUTION AND CLASSIFICATION

Historical development and paleontology. The order Proboscidea has evolved from unknown ancestors that were not much larger than pigs. They flourished during the Paleocene Epoch (65,000,000 to 54,000,000 years ago). During the course of evolution, the lower jaw elongated beyond the upper, and the tusks projected well beyond the upper ones. At this stage the nose, palate, and upper lips developed into an elongated fleshy cover to the projecting lower jaw. It is probable that the nostrils opened well above the extremity of this flap and were near the eyes. A longer lower jaw proved less useful than a shorter one, so the upper flap was converted into a multipurpose tubular proboscis. Because the nostrils shifted to the tip of the proboscis, the animal was able to breathe while submerged in water. When so submerged, the animal had to rely on its sense of smell more than sight to detect approaching predators.

Origin of the proboscis

The suborder Deinotherioidea, consisting of one genus, is an early branch of the main proboscidean stock of the Eocene Epoch (54,000,000 to 38,000,000 years ago). They lost their upper tusks and developed a downward-hooked, tusk-tipped mandible. Numerous species of the suborder occurred in Asia, Europe, and Africa and persisted into Pleistocene times (2,500,000 to 10,000 years ago). The largest was the European *Deinotherium giganticsimum*, which reached a height of 3.8 metres (12.5 feet) at the shoulders and existed during the Pliocene Epoch (7,000,000 to 2,500,000 years ago).

In the suborder Mastodontoidea, the family Gomphotheriidae comprises 15 genera, including the earliest members of the order, *Phiomia* and *Palaeomastodon*. The former were the size of donkeys, but the latter were as large as a modern Asian cow elephant. In this family the skull and neck are elongated, and the teeth low crowned. The second incisors are enlarged; the upper ones are compressed and vertical, and they retain a band of enamel. In the later evolved genera, the lower pair are bent forward, depressed, and expanded into shovellike structures that do not meet the upper tusks. The canines are absent. Among this family are *Cordillerion* of North America and *Cuvieronius* of South America. The latter became extinct as recently as AD 200 to 400.

Phiomia, which occurred in Egypt and India, was an archaic shovel-tusked form with an elongated neck. It

flourished during the Oligocene (38,000,000 to 26,000,000 years ago). The mandible and its tusks became more shovellike in *Amebelodon* and *Platybelodon* of the Miocene (26,000,000 to 7,000,000 years ago).

In *Palaeomastodon* the skull shortened, and the tusks assumed a cylindrical shape. The genus occurs in middle Oligocene deposits of Egypt. In some later genera, such as *Anancus* and *Stegomastodon,* the jaws shortened and the lower tusks disappeared. In some shovel-tuskers, the mandible remained enlarged and continued to function as a shovel for digging plant bulbs. It was probably protected by a horny pad.

Mastodontidae contains the single genus *Mastodon.* It lacked lower tusks. The tusks were about two metres (seven feet) long. Some species attained a height of about three metres (ten feet), and were covered with hair. Parts of carcasses of the recently extinct American species *Mastodon americanus* have been discovered in peat deposits and swamps.

The earliest proboscideans in Asia are *Phiomia, Gomphotherium, Platybelodon,* and *Serridentinus,* of the family Gomphotheriidae, and *Stegolophodon,* of the family Elephantidae. All occurred in the Miocene of China and some in Burma and India.

In the suborder Elephantoidea, *Stegolophodon* is intermediate between the mastodons and elephants proper. Although this genus first appeared during the Miocene of Europe, Asia, and Africa, it persisted into the upper Pleistocene of these continents.

Stegodon, which occurred during the Pliocene in Asia and during the Pleistocene in Africa and Asia, evolved from *Stegolophodon.* The skull enlarged, the jaws shortened, and the lower tusks disappeared. *Stegodon zhaolongensis* of China was a large species with the most primitive teeth in the genus. The tusks of some species such as *Stegodon magnidens* of India were about 3.3 metres (10.8 feet) in length; in others, however, they were feeble. The molars were usually low crowned, and the depression between each pair of dental folds or plates was Y-shaped, rather than V-shaped or U-shaped as in other elephants.

The genus *Mammuthus* includes all species formerly placed under *Archidiskodon, Metarchidiskodon, Parelephas,* and *Stegoloxodon.* Its species occurred in the Pleistocene of Asia, Europe, America, and Africa. Several species had great bulk and heavy tusk development.

Development of pygmy forms

On various occasions during the Pleistocene Epoch, normal-sized elephants that inhabited a continent were isolated when a part of the landmass was separated into islands by the submergence of low-lying land. As these isolated colonies of elephants multiplied, their fodder supply decreased, and the animals gradually became smaller—an unsuccessful measure against extinction. This process is evident in the East Indies and Philippines, in the islands of the Mediterranean Sea, and in certain islands off the coast of southern California.

Classification. *Distinguishing taxonomic features.* The proboscideans are classified largely according to body size; shape of the skull; dentition; and the shape, size, and degree of reduction of enamel in the tusks. Groups marked with a dagger (†) are extinct and known only from fossils.

Annotated classification.

ORDER PROBOSCIDEA

Oligocene to present; North America, Eurasia, and Africa. Heavy-bodied (graviportal) animals with snout prolonged into a fleshy proboscis (trunk). Tusks developed from upper or lower incisors or both; canines absent; cheek teeth with transverse rows of blunt cones or ridges. Skull short, high; nasal openings at a higher horizontal plane than eyes. Body size medium to large; shoulder height from about 1 m (about 3 ft) to more than 4 m (13 ft). About 300 species, all extinct but two.

†Suborder Deinotherioidea

†Family Deinotheriidae

Lower Miocene to upper Pleistocene; Europe, Asia, Africa. Upper tusks lacking; lower tusks curving downward from tip of lower jaw. One genus (*Deinotherium*); many species; height to about 3 m.

†Suborder Mastodontoidea

†Family Gomphotheriidae

Lower Oligocene to Recent (AD 200–400); Europe, Asia, North and South America. Skull and neck elongated. Teeth low-crowned; succession vertical. Later genera with protruding, shovellike lower incisors, others with substantial upper tusks and no lowers; premolars with 2 transverse crests, molars with 3. About 15 genera, several dozen species; shoulder height about 1 to 3 m.

†Family Mastodontidae (mastodons)

Lower Miocene to upper Pleistocene (possibly to early historic times); Europe, Asia, Africa, North America. Molars with rounded prominences, but no ridges; lower tusks absent, but upper incisors substantial, reaching over 2 m in length in males of some species. One genus (*Mastodon*), many species; shoulder height to at least 3 m.

Suborder Elephantoidea

Family Elephantidae (elephants and mammoths)

Lower Miocene to present; fossils from Europe, Asia, East Indies, Africa, and North America; Recent species from Africa (*Loxodonta*) and southern Asia (*Elephas*) which have probably evolved from *Stegolophodon.* Six genera, with several dozen fossil and 2 Recent species; shoulder height from 1 to about 3.5 m. The epiphyses (ends of long bones in limbs) do not fuse until the last molars appear. The molars are replaced at least three times. Marrow disappears from the limb bones early in adulthood.

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(P.E.P.D.)

Procedural Law

Law, to be effective, must go beyond the determination of the rights and obligations of individuals and collective bodies to an indication of how these rights and obligations can be enforced. It must do this, moreover, in a systematic and formal way. Otherwise, the numerous disputes that arise in a complex society cannot be handled efficiently, fairly, without favouritism, and, equally important for the maintenance of social peace, without the appearance of favouritism. This systematic and formal way is procedural law. Procedural law, then, constitutes the sum total of legal rules designed to insure the enforcement of rights by means of the courts, and thus contrasts with substantive law, the sum total of the rules determining the essence of the rights and obligations.

Since procedural law is only a means for enforcing substantive rules, there are different kinds of procedural law, corresponding to the various kinds of substantive law. Criminal law, for example, is the branch of substantive law dealing with punishment for offenses against the public and has as its corollary criminal procedure, which indicates how the sanctions of criminal law must be applied. In many countries there is an administrative procedure for the enforcement of various rights, obligations, and interests regulated by administrative law. Substantive private law, which deals with the relations between private (that is, nongovernmental) persons, whether individuals or corporate bodies, has as its corollary the rules of civil procedure, and it is civil procedure to which this article is limited. In many countries, private law itself is subdivided into two branches, civil law, the law dealing with nonbusiness relationships, and commercial law, dealing with business relationships. Each often has its own set of courts. In such countries, it is, then, possible to subdivide civil procedure in general into two branches, civil procedure in the strict sense and commercial procedure.

Private law, as opposed to criminal or administrative law, does not usually require the parties to choose the courts to resolve their disputes. They may, in fact, and frequently do submit the disputes to one or more private individuals for resolution. A private individual chosen to resolve a dispute in a binding (rather than merely advisory) fashion is usually referred to as an arbitrator, and the procedure under which he acts, as arbitration. At present, arbitration also is ordinarily clothed with some form of governmental sanction; indeed, in some countries, in particular in England, arbitration and ordinary civil procedure may be quite closely connected.

Since each system of substantive law in the world must obviously be accompanied by a system of procedural law, the different systems of civil procedure existing in the world are too numerous to be discussed within the framework of one article or, indeed, an entire volume. This article deals comparatively with some of those systems of civil procedure that have had more than local or temporary significance. Procedure under U.S. Federal Rules of Civil Procedure, which is a good example of a modern Anglo-American procedure, and those of the French and Austrian codes of civil procedure, which represent different European views of civil procedure, receive the main emphasis.

Historical growth of procedural law

ROMAN LAW

Civil procedure in ancient Rome had a marked influence on later development on the European continent and, to some extent, in England. The procedure of very early Roman law left little permanent impact on the law. Highly formalized, it was based on strict compliance with rules of pleadings and was replaced during the 1st century BC by the more flexible formulary procedure that in some respects bears marked similarity to Anglo-American civil procedure. Law suits were divided into two phases. In the first phase, devoted to defining the issues, the parties presented their claims and defenses orally to a judicial official called a praetor, whose main function was to hear the allegations of the parties and then to frame a formula or instruction applicable to the issue presented by the parties. The praetor did not decide the merits of the case. Instead, with the consent of the parties, he selected from a list of approved individuals a private individual (*judex*), whose duty it was to hear witnesses, examine the proof, and render a decision in accordance with the applicable law contained in the formula. There was no appeal. The procedure facilitated growth and change in the law: by adapting existing formulas, or modifying them, the praetors were, in effect, able to change substantive rules of law.

The formulary system

The formulary system with its separation of fact finding and determination of the law was not followed in the provinces conquered by the Romans. There, administrative officials rendered justice under general administrative powers. In the late imperial period, the procedure used in the provinces was also introduced in Rome itself. The creative role of the praetor came to an end, the formulas were abolished, and the division of a lawsuit into two phases was also terminated. Lawsuits were now initiated by a written pleading. Appeals from lower to higher judges became possible, and the procedure lent itself to delay. As a result, parties often submitted their disputes to arbitration or to religious leaders for settlement. Consequently, the leaders of various religious communities, including in particular those of the Christian Church, came to exercise judicial functions that in the very late Roman Empire received a degree of state recognition.

MEDIEVAL EUROPE

The Germanic tribes that conquered the Roman Empire in the 5th century carried their own procedure with them into the conquered territories. That procedure was quite formalistic: in court, which often was the assembly of all the freeborn men of the district, the parties had to formulate their allegations in precise, traditional language; the use of improper words could mean the loss of the case. At this point the court determined what method of proof should be used: ordeal, judicial combat between the parties or their champions, or wager of law (whereby each side had to attempt to obtain more persons who were willing to swear on their oaths as to the uprightness of the party they were supporting). Roman law procedure, however, never entirely disappeared from the territories conquered by the Germanic tribes. In addition, a modified form of late Roman procedure was in use in the ecclesiastical courts that applied the still-developing canon law. This late Roman and canonical procedure appears to have been preferable to the Germanic procedure and gradually supplanted it in Italy and France, and somewhat later in Germany, though all elements of the Germanic procedure did not disappear. In Scandinavia, on the other hand, indigenous procedure was able to resist displacement by foreign law.

The Roman-canonical procedure, with its heavy reliance on written, rather than oral, presentations, necessitated representation by learned counsel. The whole procedure was divided into rigid stages. Precise rules governed the presentation of evidence; thus the concordant testimony of two male witnesses usually amounted to "full proof," and one witness was ordinarily insufficient to prove any matter, unless he was a high ecclesiastic. A court order was needed before testimonial evidence could be used; witnesses were ordinarily examined not before the full court but by a judge, with a court clerk or notary committing the witnesses' testimony to writing for later submission to the court. This complex procedure was ill-suited to the day-to-day needs of commerce; as a result, special courts operated by and for businessmen sprang up in important mercantile centres (maritime courts, commercial courts) to deal with matters of inland and maritime commerce.

As the Middle Ages ended, there was an increasing tendency to favour written over oral evidence. At the same time, there was a tendency to "nationalize" the general Roman-canonical procedure prevalent in much of Europe and to create national procedural laws. In 1667 in France, this led to the enactment by Louis XIV of the Ordonnance Civile, also known as Code Louis, a comprehensive code regulating civil procedure in all of France in a uniform manner. The Code Louis continued, with some improvements, many of the basic principles of procedure that had prevailed since the late Middle Ages.

Early codifications

COMMON LAW IN ENGLAND

Originally, procedure in English local and feudal courts resembled quite closely that of other countries with a Germanic legal tradition. But unlike the countries on the continent of Europe, England never romanized its indigenous procedure once the latter had become inadequate but instead developed a procedure of its own capable of substantial growth and adjustment. That England was able to do this seems to have been due to two related factors, both the result of the strong monarchy that followed the Norman invasion: the growth of the jury system and the establishment of a centralized royal court system. The former offered a substitute for the antiquated methods of proof of the traditional Germanic law—ordeal, trial by battle, and wager of law—and the latter led to the creation of a definite legal tradition, the common law, and to the administration of justice through permanent professional judges, and their attendant clerks, instead of the popular assemblies or groups of wise men who rendered justice elsewhere (see also JURY; COMMON LAW).

Development of the writ

Royal courts could be used only if permitted by a special royal writing, or writ, issued in the name of the king. Such writs were at first issued when there was a complaint that local or feudal courts were not rendering justice. Later, they were issued in cases involving land; such a writ might direct the defendant to return the land or explain why he refused to do so or, later on, direct the sheriff to bring the defendant before the court so that he might answer for his conduct. Eventually the writs became standardized. Through ingenious fictions (assumptions, for judicial purposes, of facts that do not exist), substantially all litigation not reserved to the ecclesiasti-

cal or other specialized courts could be brought before the royal courts, a situation preferred by suitors, since the royal courts abandoned much of the awkward Germanic law of proof in favour of trial by jury sooner than did local courts.

As the system of royal courts developed, the parties, or rather their counsel, formulated the issues to be settled through their "pleadings" before the court in London; after that the issues would be tried before a jury in the county where the facts arose. The mechanics of pleading gradually became quite complex. Originally, Germanic pleading practices, which involved oral formulation of issues in rather precise words, prevailed. Eventually, the clerks of the court wrote a summary of these oral pleadings and later recorded the entire substance. The plaintiff had to plead facts that came within the writ used to start the action; the defendant could either generally deny the facts asserted by plaintiff or assert specific defenses.

The complexities of the common-law procedure led some parties to request relief directly from the king, who in medieval theory was considered as the ultimate fountainhead of justice. These requests were transferred to the royal chancery—that is, the office of the lord chancellor —which, in this way, developed into another court; it was supposed to deal "equitably" with cases in which the strict rules of the common law failed. In the course of time this function of the chancery developed into a body of well-defined rules known as "equity." Until the 16th century, the chancellors were generally ecclesiastics; hence procedure in chancery to obtain equity was to some extent influenced by canonical procedures. In particular, there was no jury trial, no writ circumscribing a precise cause of action, and so forth.

The procedure of the common-law courts and the existence of a separate procedure for equity matters were both taken over in the United States. In the 19th century there developed in both England and the United States movements to simplify procedural complexities. These involved several related approaches: (1) a reform in court organization, doing away with separate courts of equity and, to the extent they existed, with coordinated common-law courts of general jurisdiction and establishing a more rational system of appeals courts; (2) a reform of pleading, abandoning largely the need to plead a specific cause of action based on writs, and giving judges power to promulgate rules of procedure.

Movement toward reform

The reforms were not entirely successful; early court decisions interpreted the revised pleading rules in a restrictive fashion, and the merger of common-law and equity courts did not result in a complete merger of procedures. U.S. federal and state constitutions, for example, guaranteed a jury trial in all cases at common law, but not in equity.

PERIOD OF NATIONAL CODIFICATIONS IN EUROPE

Dissatisfaction with the system of judicial administration was a major cause of the French Revolution of 1789. One of the earliest actions taken by the newly constituted National Assembly was the creation of a new court system (1790). But no reform of a lasting nature was undertaken in the field of civil procedure. The introduction of a jury system was debated but was adopted for criminal cases only.

Napoleon attempted to restore normality and unity to France after the Revolution through the creation of codes encompassing an entire field of law and containing the best of both the old pre-Revolutionary and the Revolutionary law. His Code of Civil Procedure of 1806, however, relied heavily on the 1667 code but continued certain procedures created during the Revolution.

During the 19th century, codifications of procedural law were enacted in other countries (Italy in 1865 and Germany in 1877). They usually retained large elements of the Roman-canonical or French procedure and were often cumbersome and slow. Austria departed from the Roman-canonical model in 1895 with the adoption of a new Code of Civil Procedure. The new code adopted comprehensively the principle of oral presentation: only matters presented orally in open court were important for a decision of the case; writings could have only a preparatory role; witnesses were no longer heard before a delegated judge who prepared a written record but by the court or judge that actually decided the case; finally, the parties were obligated to present their cases fully and truthfully, and the judge was directed to make certain that all relevant facts were stated. These notions were widely followed by other countries when they amended their codes of civil procedure. Recent changes made in the French Code of Civil Procedure (particularly in 1958 and 1965) were to some extent inspired by the Austrian model. A somewhat contrary trend occurred in Italy, however, where later amendments to the more progressive 1942 Code of Civil Procedure to some extent reemphasized written presentations. A step contrary to some modern European thinking was also taken by the new Belgian Judicial Code of 1967 (effective 1969). It reduces the role of the judge and correspondingly increases that of the parties and their counsel. Even more atypical have been developments in Japan. That country adopted a Code of Civil Procedure, very largely modelled on the German Code of 1877, in the year 1890. In 1926, the code was amended in order to expedite procedures. Austrian ideas about the role of the judge were heavily relied on. But after the defeat of Japan at the end of World War II, an attempt was made to introduce some of the features of the American civil trial, with its heavy reliance on the presentation of facts by the parties' attorneys and the correspondingly less significant role of the judge. For a variety of reasons, the attempt was not entirely successful. Present Japanese law blends a procedure largely based on the German model with some features of Anglo-American origin.

Elements of procedure

CONSIDERATIONS PRIOR TO TRIAL OR MAIN HEARING

Jurisdiction, competence, and venue. The words jurisdiction and competence refer generally to the power of an official body (legislative, judicial, or administrative) to deal with a specific matter. This article is concerned with judicial jurisdiction, the power of a court to act. That power may depend on the relationship of the court to the subject matter of the action; in such an instance one speaks generally of subject matter jurisdiction. The jurisdiction of a court may also depend on the relationship between the court and the defendant in the action. As to that relationship, important conceptual differences exist between the countries of the common-law orbit, which usually refer to this problem as the question of "jurisdiction over the defendant" and countries with a continental European tradition, which are likely to subdivide the problem into questions of "international jurisdiction" (*i.e.*, which country may take the case) and questions of "territorial jurisdiction" (*i.e.*, courts in which part of the country may take the case). In the United States, questions of jurisdiction are complicated by the due process clause of the Constitution, which imposes limits on the states' power to confer jurisdiction on their courts. It has been suggested that the word jurisdiction should be used only when discussing the power of the courts in a state generally to act in a given situation without violating the due process clause, whereas the word competence should be used to refer to the power of a particular court in a state to act pursuant to the laws of that state, but this distinction has not been widely followed; frequently, the terms jurisdiction and competence are used interchangeably. (For a more detailed discussion, especially in relation to matters containing foreign elements, see CONFLICT OF LAWS.)

For reasons having to do with the historical tradition of the common-law courts—especially with the practice of the royal courts in London to send out judges to conduct trials throughout the country with the help of locally selected juries—in common-law countries the various higher courts existing in a given state are not ordinarily viewed as completely separate tribunals but essentially as parts of one overall court. Hence the question of "venue," which is usually not so problematical as lack of jurisdiction. The most common venue rule is that the

Venue

action may be initiated where either the plaintiff or defendant resides, where the cause of action arose, or, if real property is involved, where the real property is situated. Even when all formal legal requirements of jurisdiction and venue are fulfilled, American courts are sometimes authorized to dismiss an action on the ground that the choice of court will create serious inconvenience for the parties or the court itself.

Parties. In spite of differences in terminology, rules prevailing in various legal systems concerning the parties to a case show some basic similarities. It is quite generally recognized that in order to participate in a law suit as a plaintiff or as a defendant, a party must have the capacity to sue and must, in addition, be a "proper" party (that is, have standing before the court).

All persons recognized as such by law, including corporations and even groups of individuals without formal corporate status, may, at least in the abstract, assert their rights in court and are liable to suit by others. In practice, however, the law obliges certain persons to act through another person. These persons, such as minors and mental incompetents, are usually said to lack procedural capacity, or to have it only to a limited extent, and must act through parents or guardians. Corporations can frequently sue in their own name, though some countries (such as Sweden) require that actions be brought by or against the board of directors or similar body.

All legal systems limit in some respects the number of individuals who may engage in lawsuits; generally, only persons who have an actual interest in the outcome of the lawsuit may sue or be sued. Furthermore, only a person who owns (or claims to own) the right or obligation under suit can be a party to a suit involving that right. In the United States this rule is frequently called the real party in interest rule, and similar rules are found elsewhere—for example, in Italy and France. Frequently the real party in interest will be the person who will ultimately benefit from any recovery obtained, but this is not true in all cases. In the United States, for instance, the trustee of a trust is deemed the real party in interest in connection with suits involving the trust, though any recovery obtained by him will ultimately benefit the beneficiaries of the trust. Because of the problems inherent in the real parties in interest rule, some modern codifications have omitted any reference to it.

In connection with matters of public law, the ability to sue is sometimes restricted less narrowly than in pure private-law actions. In France, for instance, citizens are able to bring actions in court to attack municipal expenditures (though not expenditures of the national government).

Class suits

Ordinarily, only parties to an action are bound by its outcome. But when a very large group may be affected by a particular controversy, it is frequently impractical for all members of the group to join in the litigation. For this reason, the law in the United States sometimes authorizes so-called class actions, in which a limited number of persons sue to vindicate the rights of a much larger class; in the end all members are bound by the outcome of the suit. Class actions are frequently, but by no means exclusively, used in actions involving shareholders of a corporation. Countries with a Roman-law tradition generally do not authorize class actions, though in some limited situations proceedings brought by one person may affect the rights of other persons not party to the suit.

Although a person is ordinarily free to decide for himself whether or not he wants to attempt to enforce his rights by legal proceedings, his refusal to do so may cause harm to others. For this reason, the laws of many countries authorize creditors, for instance, to prosecute actions of their debtors if the debtors fail to do so.

Legal controversies are not necessarily limited to two persons, one plaintiff and one defendant. Sometimes, for instance, in actions involving co-ownership or joint obligations, the rights of several parties may be so inextricably intertwined that, for all practical purposes, it is impossible to adjudicate the rights of one person standing alone. In such cases, the procedural rules of many countries require that all such persons be made parties to the lawsuit. In other cases, however, the presence of several individuals may be merely useful, but not absolutely essential, to a resolution of a dispute. In such cases the law simply "permits" the individuals to join in, or be brought into, the lawsuit. It is also possible that persons not originally participating in a lawsuit may find that their rights are affected in some manner, directly or indirectly, by such suit. To avoid a multiplicity of actions, such persons will often be authorized to intervene in the pending lawsuit, if their own claim has a sufficiently close connection in law or fact with it. In civil-law countries a person wishing to support the claim of some other party must proceed by way of direct intervention. In the United States, an individual who wants to promote the claim of some other party may ask the court for leave to appear as amicus curiae (friend of the court) so that he may present arguments in favour of the person he supports. In certain cases, furthermore, defendants are authorized to bring third parties into an action when, for instance, these third parties are or may be liable to the defendants on account of the claim asserted against the defendants. This is known as impleader.

Amicus curiae

In general, a person's capacity to sue or be sued is not affected by the fact that he is an alien or nonresident, unless a state of war exists between his home country and the country he wishes to sue. Even a state of war generally will not destroy capacity to be sued. But an alien may experience some disadvantages. Many countries, for example, withhold legal aid from aliens, particularly if the alien's home country does not grant reciprocity. More importantly, many European and Latin American countries require alien plaintiffs to post security to guarantee that they will be able to reimburse the defendant for the expenses of the lawsuit, and sometimes even for additional damage, should they lose the case. As a result of the 1954 Hague Convention on Civil Procedure and numerous other treaties, this security for costs has been eliminated between many countries. In the United States, the nationality of a party is not material to the issue of whether security for costs is due; any nonresident of the state where the action is brought is required to post security. The rule in most other countries with an English legal tradition is analogous.

Provisional remedies. Lawsuits frequently take a long time. A judgment in an action concerning whether or not the defendant has the right to cut down certain trees, for instance, will be of little value if, while the suit is pending, the trees have already been cut down; in like manner, a judgment for a sum of money will be quite useless if the defendant is able to conceal or squander his funds while the parties litigate. For these reasons, legal systems quite generally provide so-called provisional remedies that enable the plaintiff to obtain some guarantees that any judgment obtained against the defendant will not be in vain. There appears to be a rather remarkable similarity between remedies in common-law and civil-law countries, although the legal technicalities are often different. The provisional remedies are frequently available even before an action has been initiated; but in such a case, an action must ordinarily be started within a short period of time after the grant of the remedy.

Attachment

Some remedies serve to prevent the disappearance either of funds required for the payment of the eventual judgment or of specific property involved in litigation. This purpose is served by attachment (bringing the property under the custody of the law), replevin (an action to recover property taken unlawfully), or other similar remedies. Usually, the remedy is granted by a judge at the request of the plaintiff, upon a showing that certain facts exist that make it probable that the plaintiff has a good claim and that the payment of the judgment by defendant may be threatened. Attachment ordinarily involves the seizure of the property by an officer of the court, who will hold it pending final disposition of the case, or, occasionally, involves merely an order to the person holding the property not to dispose of it. Attachment is not necessarily limited to tangible property but can also be used in connection with all sorts of intangible property (such as money due, or bank accounts). These remedies are grant-

ed in a proceeding in which the defendant is not heard (*i.e.*, ex parte).

Other remedies are intended to stabilize a situation pending the outcome of litigation. In such instances, courts are frequently authorized to issue orders (known in Anglo-American law as temporary injunctions) commanding the parties to do or not to do certain acts that may cause irreparable harm to the other side while the suit is pending. In both civil-law and common-law countries, orders of this nature ordinarily are granted only after a hearing in which both sides appear. Sometimes a court order of an even more temporary and short-lived nature (temporary restraining order) may be obtained without hearing the other side.

In countries with a common-law tradition a person disobeying an injunction issued by a court is guilty of "contempt of court" and can be punished quite severely. In civil-law countries, punishment for contempt is largely unknown, and since broad orders to defendants may therefore be difficult to enforce, such orders are sometimes limited to specific narrow situations. The Supreme Court of the United States has recently cast some doubt on the propriety of granting ex parte remedies.

The commencement of the action. In Anglo-American procedure, finding the facts has traditionally been the function of the jury, which cannot conveniently be kept together except for a brief period of time; proof taking therefore has to be concentrated in one continuous episode, the trial. As a result, a lawsuit is generally divided into two stages, the first, or pleading, stage and the trial stage. At the pleading stage the parties notify each other of their claims and defenses; at the trial stage, they or their counsel prove their factual contentions before the jury primarily through the oral examination of witnesses produced by them. The verdict of the jury and the judgment based on it follow immediately thereafter.

A different general pattern is followed in countries whose procedure is based on the Roman-canonical procedure. Since there is no jury, there is no need for a concentrated trial, and the procedure consists essentially of a series of hearings at which counsel argue their clients' position and submit documentary evidence; any other form of evidence can be utilized only with a special court order definitely describing the type of evidence and the matter to be proved by it. Hearings with argument continue after the evidence has been taken.

The nature of the summons and the requirements of service. In most countries when a civil action is initiated, some form of notice to that effect must be served immediately upon the defendant. This notice may consist merely of a statement to the effect that the plaintiff is suing the defendant and that the defendant must appear in court on a specified day or be in default. Such a notice is commonly referred to as a summons, the successor to the old English "writ" initiating the action. When the notice of the lawsuit consists only of the summons, it is necessary, either at the same or a subsequent time, to supply the defendant with more specific information about the nature of the claim against him. This information is contained in plantiff's first pleading, the complaint.

In common-law countries it was originally necessary to deliver the summons to the defendant in person (personal service). Now, other forms of service to notify the defendant, such as leaving the summons with an agent, employee, or a person of suitable age at his home, are also permissible provided their intent is to apprise the defendant that the suit is pending. Service by publication in a newspaper is generally authorized only when no other form of service is reasonably possible.

In civil-law countries the summons proper is often combined with the statement of plaintiff's claim in a single document (*assignation* in France, *citazione* in Italy). Other detailed formal rules must often be observed, and the documents sometimes must be written on paper bearing tax stamps, a requirement still in force in Italy; in France copies must be presented to a tax office for "registration" for tax purposes. The document need not be served to the individual himself; a member of the household, or even a neighbour or janitor, usually will be an adequate recipient. In Austria and several other countries, service can be effected through the use of the mail.

Formal rules

Pleadings. Pleadings are the formal written documents by which the parties set forth their contentions. They serve several functions including giving notice of the nature of the claim or defense, stating the facts that each party believes to exist, narrowing the number of issues that ultimately must be decided, providing a means to determine whether the party has a valid claim or defense, and serving as a record of what has been actually decided once the suit is ended.

In the English common law the pleadings were primarily designed to state the legal theory relied upon and to narrow the issues to be tried. Accordingly, in common-law proceedings, the plaintiff and defendant alternately submitted documents, each responding to the one that preceded it, and narrowed the field of conflict until there remained only one issue, upon which the trial would be based. Because narrowing the issues was deemed of great importance, the parties were not allowed to plead alternative or contradictory states of fact and the defendant was permitted to rely on only one defense at one time.

In the United States during the 19th century, numerous procedural reforms were instituted. The parties were no longer required to plead on the basis of legal theories but instead were to allege a statement of facts constituting the cause of action or defense; the court could then apply any legal theory that was applicable under the facts alleged and later proved. The insistence upon fact pleading had substantial drawbacks, however, especially since the courts demanded a high degree of specificity, made technical distinctions between fact and evidence (forbidding the insertion of the latter in the pleading), and bound the parties to prove the facts alleged or lose the lawsuit. This last rule was particularly harsh since it forced the party to allege detailed facts early in the proceedings when he frequently was not yet certain precisely what facts had occurred.

Modern reforms have gone a long way toward elimination of the injustices of the former system. U.S. federal rules require only "a short and plain statement of the claim showing that the pleader is entitled to relief"; the defendant "shall state in short and plain terms his defenses." There is no requirement that legal theory be stated in the pleading nor that only facts be alleged. Other rules specifically permit the parties to plead alternative or contradictory claims or defenses and provide that in the usual case, only two pleadings, the complaint and the answer, shall be permitted. The effect of these changes has been to substantially downgrade the importance of the pleading stage of the lawsuit. The primary function of the pleadings is now only to give a general notice of the subject matter of the suit to the opposing party.

European pleadings

Under modern European codes, pleading problems, for a variety of reasons, have not been as pronounced as in Anglo-American law. The narrowing of issues is generally an essentially judicial function, to be achieved either at a special preliminary hearing or even at a plenary hearing before the full court; the creation of a permanent record is a function of the final judgment, which unlike the general—and therefore uninformative—verdict in an American jury trial must ordinarily contain a description of the facts and legal reasons on which it is based. Pleadings therefore serve primarily to inform the court and parties concerning their respective claims, a function of limited importance, since under some codes (such as the Austrian Code of Civil Procedure of 1895) only statements by the parties or their counsel in open court are fully effective for this purpose. In addition, amendments or changes can ordinarily be made without difficulty, though, in order to avoid dilatory tactics and surprise, some limitations exist. In France, for instance, it is not permissible to add new claims unless they are related to the existing claim, but new facts and legal arguments are permissible.

European pleadings tend to be more general than English and American, with fewer distinctions between ulti-

mate facts, evidentiary facts, and matters of law. In some countries, such as France, it is usual to start the action by pleadings of the utmost generality, subject to further elaboration later.

Appearance. The summons or analogous document by which the plaintiff initiates his action quite generally commands the defendant to appear in court a specified number of days after its service. In case of failure to appear, he is threatened with a "default" judgment. In both the Anglo-American and the continental European systems the appearance in court is normally a legal fiction. The defendant "appears" by serving plaintiff with a notice indicating that he will defend the lawsuit and giving the name of the attorney or similar representative who will act for him in this connection. Certain other procedural steps indicating a willingness to defend the lawsuit are sometimes considered the equivalent of such a notice.

The time limits for the appearance vary greatly. European countries frequently provide a great many different time periods varying with the distance between defendant and the court where the action is pending. In France, for instance, a defendant residing in that country must appear within eight days, whereas one residing elsewhere in Europe has eight days and one month; these time periods can be shortened by judicial decision in case of urgency. In some countries the time to appear is fixed by the court. Less attention is usually paid to geography in the United States. In New York, for instance, the defendant must appear in 20 days if the summons was served personally, and 30 days if some other form of service was employed.

In some countries, where appearance involves either actual presence in courts, or at least the delivery of documents to the court (Italy, Sweden), plaintiff and defendant may both be required to appear.

The preparatory stage. As noted above, there is a fundamental difference between Anglo-American procedure and the civil-law procedure, with the Scandinavian countries taking a somewhat intermediate position. In countries whose procedure is based on English common law, the concentrated trial, traditionally before a jury, serves as a climax to earlier procedures. At this time, the parties attempt to prove the facts at issue, primarily through the presentation of oral evidence. The climax of a European proceeding, however, is the hearing before the full bench of judges—a hearing that is essentially devoted to argument of counsel and the presentation of documentary evidence; any other type of evidence usually requires a specific court order for its utilization. In both legal systems there are procedures to prepare for the trial or hearing.

In Anglo-American procedure a preparatory phase can be devoted to numerous purposes. First, since a jury trial is required only when there are disputes as to matters of fact, the court may be asked to make a decision on those cases that can be decided purely on legal matters, without any regard to the facts in dispute. This will be true, for example, when the court lacks jurisdiction or when it is obvious that a dispute between the parties as to the facts is more apparent than real. In these cases the party concerned will address a motion to the court (either a motion to dismiss for lack of jurisdiction or a motion for summary judgment) that can be decided immediately by a judge sitting alone, without waiting for the availability of a trial date.

It should also be noted that there may be a pretrial hearing before a judge, at which the judge will attempt to narrow the issues in controversy and, if possible, try to settle the case, thus making the trial unnecessary.

If the suit has not come to an end as a result of such preliminaries, the parties must prepare for trial. At the trial, evidence is presented in an uninterrupted fashion, without any possibility for additional proof after its close; each side in the end must stand or fall on the testimony presented by it.

European preparatory phase

The European system is in some ways similar to the Anglo-American. Frequently, such questions as jurisdiction can be decided in the preliminary phase, without waiting for the full hearing. The preliminary phase may also serve to narrow issues and produce a settlement. But differences in basic structure in some of the European codes lead to variations in emphasis. The absence of a concentrated trial, for instance, makes it much less important for a party to have detailed knowledge of the facts known by the other side. Further, proof proceedings sometimes occur during the preliminary phases rather than at the main hearing; though in Austria the full court holds hearings devoted to all aspects of the case, without distinguishing between matters considered preliminary and those more pertinent to the main hearing.

Pretrial motions. Because court calendars for jury trials are often extremely crowded, especially in the larger cities, the parties involved in a case often will resort to pretrial motions if there is any remote possibility that such an action would lead to a resolution of the dispute without trial. The party making the motion summons his opponent to appear before a judge designated for that purpose and transmits at that time copies of the papers pertaining to the motion, such as sworn statements (affidavits) of persons having knowledge of the facts or memorandums concerning the applicable law; the other side may submit opposing papers. At the time the judge hears the motion, attorneys for both sides argue briefly concerning the matter in question; no witnesses are heard. In addition to cases in which there may be a lack of jurisdiction, it may also occur that the right asserted by the plaintiff does not exist and that he is not entitled by law to relief; in either case a motion for dismissal would be made.

Summary judgment

On a somewhat different plane stands the motion for summary judgment. Frequently it appears that the issues of fact raised in the pleadings do not really exist. In such a case, since the outcome would not be in any reasonable doubt, a trial would be a mere formality. To avoid the needless expense and delay of a trial, a motion for summary judgment can be made. (The rules relating to this motion are strict so as to abridge neither the right of every man to his day in court nor the constitutionally guaranteed right to a jury trial.) The sole function of the judge is to determine if, from all the available evidence, there exists a material issue of fact that is honestly disputed; he is not to determine what the true facts are. If he finds a material issue of fact to be in dispute, he must deny the motion and set the case down for a future trial. If he finds no such issue, he may grant a final and binding judgment.

In those civil-law countries that have a preparatory phase before a single judge and a final hearing before a three-judge bench, procedural defenses similar to pretrial motions are ordinarily raised before the single judge. Sometimes, however, in cases of lack of jurisdiction or lack of competence a hearing is held before the full court. Where the issue is one of territorial competence the result may be the transfer of the case to the proper court. General summary proceedings have lost considerable importance in France and have been abandoned completely in Italy, but in actions involving claims based on negotiable or other written instruments, for instance, special procedures have been developed that permit a judgment to be obtained with great dispatch, particularly if the defendant has no effective defense on the merits.

Discovery procedures. In general, English common law lacked procedural devices aimed at giving the parties and the court advance notice of the factual contentions of both sides prior to the trial of the action. Whatever information was obtained by a party about the opposing party's case was received from the pleadings. This absence of discovery devices was a reflection of a judicial philosophy that held that surprise was a proper tactical device and that withholding information from one's opponent until trial would prevent an unscrupulous adversary from fabricating evidence. Limited discovery devices were, however, available in the equity courts.

Reforms were instituted in the 19th and 20th centuries. A mid-19th-century New York code, for example, provided that each party could serve written questionnaires on its adversary, could compel the adversary to produce documents prior to the trial, and could, under some circumstances, take the oral deposition of any witness,

whether or not a party to the action. Even with these changes, discovery proceedings were limited. In 1938 new U.S. federal rules expanded the discovery process further. It was hoped that more complete disclosure would result in a more thorough preparation and presentation of cases, encourage pretrial settlement by making each party cognizant of the true value of his claim, and expose, at an early stage in the proceedings, insubstantial claims that should not go to trial.

Thus, a party may seek discovery not only of information that would be admissible at trial but also any information that, though not admissible, might lead to the discovery of admissible testimony. Some limitations remain, however; materials prepared in anticipation of the pending litigation by or for a party, for instance, are not discoverable unless the party seeking discovery shows a substantial need for the information and an inability to obtain substantially equivalent information by alternative means. Most discovery devices may be utilized without prior court approval and the procedures take place in lawyers' offices; judicial intervention must ordinarily be sought only when there is a dispute concerning the permissible scope of discovery or when there is a need to impose sanctions for failure to obey a court order compelling discovery.

European procedures to secure information

With the exception of procedures to secure, in advance of lawsuit, evidence that is in danger of being lost (for instance, because a witness may die), there are few procedures in civil-law countries to enable a party to secure information to use later. There are several reasons for this. Sometimes it has been viewed improper to compel a party to disclose information that may help his adversary. The absence of a concentrated trial makes it less important to have all information available at once, even more so because appeals ordinarily involve a rehearing of the whole case. The greater role given the judge in some countries (such as Austria and Germany) in bringing out factual matters further reduces the need to obtain information in anticipation of the hearing.

Consequently, discovery of documents is usually possible only in very limited cases, although a party that actually intends to use a document has to make it available to the other side. In France, for instance, production of documents to the other side is possible in bankruptcy and related commercial matters, and it is required in commercial cases generally that books be produced for inspection by the court. Traditionally, discovery of documents has been unavailable in noncommercial cases; legislation in 1965 did authorize the judge to request the parties to produce any documents, but this is production before the court, not for a party's use as such.

Pretrial conference. The discovery process frequently makes the parties aware of significant issues not previously considered or may make it clear that an issue considered important before discovery is no longer so. In order to provide a means for reflecting these changes and also to assist in simplifying the issues to be tried, shortening the time for trial, and possibly eliminating the need for trial completely, the court may direct the parties to appear before it for a pretrial conference.

At the conference, no testimony of witnesses is heard, and no formal adversary proceeding takes place. The attorneys representing the litigants, with the assistance of the judge, try to reach agreement on amendments to the pleadings, the elimination of issues raised at an earlier stage that are no longer deemed pertinent, and the crystallization of the real, controversial issues that must be determined at the trial.

An indirect benefit of the pretrial conference is the possibility that a settlement of the case will be reached by the parties without the necessity of trial. Although some authorities feel that this should be a primary goal of the pretrial conference, the prevailing view is that "settlements must be a by-product rather than the object of pre-trial, the primary aim being to improve the quality of the expected trial rather than to avoid it." It should be noted, however, that a considerable number of lawsuits, and the vast majority of personal injury cases, are settled before a final verdict.

In civil-law countries, procedures somewhat analogous in purpose to pretrial conferences are fairly prevalent. Since such preliminary hearings are ordinarily held before a single judge, rather than a formal three-judge court, a considerable saving of judicial time may result. In 1965, France, for instance, reformed its practice in this respect. There, each case is assigned to a special "prehearing" judge, who sets time limits for the exchange of pleadings, decides how many pleadings after the original summons and complaint shall be used and when they shall be submitted, and may penalize dilatory parties by delivering a default judgment or, if both sides are dilatory, by striking the case off the calendar. In addition, he may call in the parties' counsel for a conference and must make sure that all documents that the parties intend to use at the main hearing have been filed. He may also call in the parties themselves for a conference concerning a possible settlement. He must, in short, either settle the case or put it in shape for the formal hearing.

THE TRIAL AND THE MAIN HEARING

The climactic and decisive part of an Anglo-American civil action is the trial, in which the parties present their proof in a concentrated fashion. The climactic event in a lawsuit based on European codes is the hearing before the full court. The differences between these two procedures are so fundamental that discussion of the two will be essentially separate.

The jury system. The following discussion will deal with the jury in terms of specific aspects of trial procedure. For a more detailed presentation of the jury system, see JURY.

Many of the procedural rules governing trials in civil actions have been designed to reflect the basic premise that the function of the jury is to determine the facts of the case, whereas the function of the judge is to determine the applicable law and to oversee the parties' presentation of the facts to the court. The consequences of the presence of the jury have been so pervasive that even in cases tried by a judge without a jury, the procedural rules designed to accommodate jury trials remain largely intact, with the important exception, of course, that the judge will determine both the facts and the law.

The order of trial. Although some variations may exist, a trial is conducted most frequently in the following manner. The attorneys for plaintiff and the defendant make opening statements to the jury, outlining what each conceives to be the nature of the case and what each hopes to prove as the trial proceeds. Next, the attorney for the plaintiff presents his case by calling witnesses, questioning them, and permitting them to be cross-examined by the attorney for the defense; when the former has concluded his presentation, the latter frequently will ask for a dismissal of the suit for failure of plaintiff to establish a prima facie case (that is, a case sufficient until contradicted by evidence); if this is unsuccessful, he will call and examine witnesses in order to establish his defenses, and these witnesses are subject to cross-examination by the plaintiff's attorney. The attorneys for each side then make a closing argument to the jury, marshalling the evidence presented in a light most favourable to their respective clients; the judge will instruct the jury on the applicable law; and the jury will retire to deliberate in private until it reaches a verdict, which will then be announced in open court.

The rules of evidence. Although the parties, and not the judge, are charged with the primary obligation to call and question the witnesses, the judge must act as arbiter in all disputes between the parties concerning the admissibility of evidence. When one party objects to the introduction of testimony, the judge will decide whether or not, in accordance with established rules of admissibility, the evidence sought to be introduced is to be heard by the jury. In general, the rules of evidence are designed to screen from the jury evidence that is either deemed not reliable or, if reliable, considered to be capable of confusing the jury in some way. As a consequence, evidence based on hearsay and, to some extent, opinion is prohibited. In keeping with the adversary system, the judge is

not entitled to rule that evidence is inadmissible unless a party objects to its introduction. The party objecting to the evidence must state the grounds for his objection and the judge must permit the jury to hear the evidence unless the specified grounds given by the attorney are applicable. Even within this narrow framework, the judge's role is limited, for the rules of evidence leave little room for discretion on the part of the judge.

Directed verdicts. When the party having the burden of proof of an issue has completed its presentation to the jury, the opposing side may ask the court to rule as a matter of law that the evidence presented does not provide sufficient proof for a reasonable jury to find for the party who presented the evidence. When a judge so finds, he may "direct a verdict," thus in effect withholding from the jury the right to rule independently on the issues at all. It has been held that this device, if properly applied, is not a violation of the constitutional right to jury trial because similar devices have historically been available to judges and because a verdict is directed only when there has not been sufficient evidence introduced to create a material issue of disputed fact for the jury to decide. The granting of a directed verdict results in a final judgment, and the termination of the trial.

Instructions to the jury. It is the obligation of the judge, at the conclusion of the trial, to instruct the jury as to the applicable law governing the case in order to guide it in arriving at a just verdict. Although this is solely the judge's obligation, in practice the parties will propose instructions for his consideration. The judge then selects among the proposals that have been submitted and offers the parties the opportunity, out of the hearing of the jury, to object to any proposed instruction that they deem to be incorrect. Failure at this time to object generally precludes a party from arguing later that the instructions given were incorrect.

There has been much debate as to the relevance of jury instructions generally, some commentators urging that the jury seldom understands the instructions given or often ignores them. The charge, however, that the judge gave improper instructions to the jury is one of the most frequent grounds of error offered by parties when appealing an adverse decision.

Comments on evidence

In addition to the judge's obligation to charge the jury on the law, U.S. federal rules and some other procedural codes permit the judge to comment on the evidence. When it is permitted, the judge may give his opinion with regard to the merits of the case so long as he makes clear to the jury that this opinion is not binding and that the jury, not he, is solely responsible for finding the truth as to the facts in dispute.

Types of verdict. Most frequently the jury will be requested to return a general verdict—that is, a decision merely stating in general terms the ultimate conclusion that it has reached (for example, the award of X dollars to plaintiff). This form of verdict gives considerable leeway to the jury and permits, if it does not encourage, some deviation from a strictly logical and technical application of the law to the facts. An alternative that offers greater control over the decision-making process is the special verdict whereby the jury is instructed merely to answer a series of specific factual questions proposed by the judge, who will then himself determine the verdict, based upon the jury's responses to the questions asked. Because of the difficulty in drawing up questions that would cover completely the issues of the case, the special verdict is cumbersome and not frequently used.

New trial and other relief. After the trial is completed, either party may request the trial judge to vacate the verdict and grant a new trial. Innumerable grounds are available for requesting a new trial, including, for example, judicial error, excessiveness of the verdict, and jury misconduct. Considerable discretion is given the judge, and a decision to grant a new trial will seldom be overturned on appeal. The grant of a new trial, unlike the directed verdict, does not result in the judge substituting his opinion for that of the jury but only mandates another jury to hear the case at another trial. But in the very limited cases in which a judge may grant a directed verdict, he can also substitute his decision for that of the jury by a judgment not on the verdict.

The main hearing. In civil-law countries the hearing before the full court is the essential part of a civil action. At that hearing, counsel for both sides present argument as to the law and the facts of the case and submit documentary evidence. The hearing serves several purposes: it informs the court of the contentions of the parties, both legal and factual; it narrows the issues that may have been raised by the original pleadings; and it leads to the submission of at least one type of evidence, namely, documentary evidence. The extent of proof presentation and the narrowing of issues vary from country to country.

In such countries as Italy and France, which divide the lawsuit into a preparatory and a final stage, the judge in charge of the preparatory proceedings attempts to narrow the issues and may, for this purpose, examine the parties. In countries where there is only one stage, this process takes place during the full hearing. In general, in civil-law countries, evidence other than documentary evidence may be introduced only pursuant to a specific court order specifying the matter on which such evidence is to be received and the form that such evidence is to take (witness, experts, etc.). But again two forms are possible. Under the Austrian code of civil procedure, the court that decides the case must hear the witness, expert, or whatever. In such a case, an order will be made at the hearing and will be implemented by the calling of the witness or expert. Subsequently the arguments of counsel may continue, interrupted perhaps by a new proof order, should the court feel this to be necessary. In France and Italy the court or the judge of the prehearing phase will make an order for the hearing of a witness or expert, but the witness or expert will be heard by a single judge not ordinarily part of the court, who will prepare a summary of the testimony. Later on, that summary will be submitted to the court; there will be additional argument and finally a decision will be made based on the record so made. Because witnesses or experts are always acting pursuant to court order, they are never considered a party's witness.

Types of proof proceedings. Various types of proof proceedings are generally available, including (1) hearing of witnesses who are not themselves parties; (2) the expert's report; (3) the examination of parties, either informally or pursuant to formal interrogatories.

A party wishing a witness to be heard must make an appropriate request, informing the other side of the name of the witness and the subject on which the witness is to be heard; this is to enable the party to prepare its own side of the case. At the examination the judge will ask the witness to state in narrative form what he knows about the precise issue mentioned in the proof order; subsequently, the judge may ask additional, clarifying questions. If counsel for both sides wish to propose questions, they must ordinarily put them to the judge, who presents them to the witness. A more or less extensive summary of the testimony is prepared immediately by a clerk under the direction of the judge and signed by the witness, the judge, and the clerk. In the case of witnesses who live too far away from the court where the action is pending, interrogation sometimes takes place in a local court.

The examination of an expert is obtained in the same manner as that of a witness. Although the parties may suggest an expert to the court, those chosen are ordinarily taken from a list of experts approved by the court. The expert is considered an impartial auxiliary of the court; his use is ordinarily limited to cases involving some technical or scientific problem. The court or judge issuing the proof order may authorize him to make certain scientific investigations (*e.g.*, in an automobile accident case, to examine the car involved) and to report thereon.

Parties not considered witnesses

Parties are not considered witnesses, and different procedures for parties ordinarily exist. A court is usually authorized informally to question parties, ordinarily not under oath, either on the court's own motion or on the request of a party. Though this questioning is designed mainly to narrow issues, it does also have a function in terms of evidence. In Austria and some other countries

the judge questioning a party may put the party under oath if he feels this to be necessary for an elucidation of the truth. In other countries, a party may be challenged by his adversary to make a statement under oath.

Rules of evidence. In European courts, rules as to the admission of evidence are ordinarily quite liberal since there has been no need to develop complex rules to keep certain evidence from a jury. It is generally required that evidence relate directly to the facts in issue and be neither superfluous nor unduly repetitious. But since judicial review of lower court decisions on the admission of evidence is frequently quite limited, these requirements have never been developed into the detailed rules existing in Anglo-American law.

There are, however, some rules restricting testimonial evidence. In the first place, certain groups of persons, including parties and frequently close relatives of parties, may not be witnesses. Furthermore, confidential information acquired by certain professions (clergymen, doctors, lawyers, public officials, and others) may not ordinarily be divulged. In addition, there are rules requiring written proof in certain cases, such as birth, marriage, death, and some legal transactions.

Hearsay

The hearsay rule and its numerous exceptions are quite unknown in countries whose procedure is based on the European codes. That an individual may have only indirect knowledge of an event will not usually prevent his testimony as to the event, although it will affect the weight given it; at times, however, courts will refuse to hear testimony of a witness whose connection with the events in issue is utterly remote. The absence of a hearsay rule makes it possible to utilize many forms of documentary evidence not available in Anglo-American countries, such as written, unsworn statements of witnesses who do not later testify, written opinions of experts, and so on, though the courts do not necessarily give much credence to such items.

All modern European codes reject the Roman-canonical principle according to which a predetermined weight must be given to the various kinds of evidence; instead the court gives each item of evidence whatever weight seems reasonable under the circumstances of the individual case. There are some exceptions to this, however. Countries with a Latin tradition frequently accord great weight to public and notarial documents.

In general, it can be said that because the free evaluation of evidence is normally possible and because the production of evidence is so largely under judicial control, questions of burden of proof are much less important in countries governed by European procedural codes than in the Anglo-American system.

It is sometimes said that civil procedure in continental European countries is inquisitory in nature and that the strongly accusatory features of Anglo-American civil procedure have not found favour there. European courts often have an affirmative duty to clarify the issue and are frequently authorized to call witnesses or experts on their own motion, though the extent to which they make use of this power may vary. But the basic impetus for the lawsuit always comes from the parties. There are thus inquisitorial elements, but no true inquisitorial procedure.

Judgment and execution. *Drafting and form of judgment.* When proceedings are terminated, the court that has considered the case will render a judgment. In such a case one speaks of a final judgment. Judgments deciding some procedural matter but not terminating the proceedings are known as interlocutory judgments.

In American practice, the judgment of a court after a jury trial is presented in a stylized document that merely recites certain data relating to the lawsuit, such as the names of the parties, the fact that a jury verdict has been rendered, and the disposition to be made. No detailed grounds are given for the decision. If a judge decides a case without a jury, he is often required to indicate the factual and legal bases for his decision in order to facilitate appellate review; in practice, such findings, too, are often of a rather stylized nature. Courts sitting without juries sometimes prepare, in addition, an opinion in which their reasoning is explained in narrative form.

Judgments in civil-law countries quite generally consist of not only statements indicating the names of the parties and the like and the decision of the court but also an opinion in which the court explains its decision. The opinion may vary in style. In Germany and Austria, it is narrative in nature, as in the United States; in France, it is traditionally cast in the form of one long sentence consisting of a syllogism using the facts and the applicable law as premises. When the court consists of several judges, it is frequent practice in Anglo-American countries for judges who disagree with the decision of the majority to prepare and file dissenting opinions, in which they explain the reasons for their disagreements. In civil-law countries, such dissenting opinions are rarely allowed; indeed, the courts are generally forbidden from disclosing the position taken by an individual member.

Filing of judgment

Quite generally, originals of judgments are filed in court clerks' offices; the parties may then procure copies to use as they see fit. In some countries, the rules for the formal preparation, signing, and filing of judgments tend to be quite technical and complex; this is much less so in the United States. Furthermore, judgments must frequently be written on stamped paper or presented to some tax office for the payment of a tax.

The effect of judgments: res judicata; collateral estoppel. Judgments generally have a continuing effect on parties and others long after they are rendered. In some situations the doctrine of res judicata will grant a binding effect on issues determined in the lawsuit. The doctrine is intended to avoid excessive litigation and is known in some form in most countries. Thus, it is uniformly held in the United States that when a valid and final personal judgment in an action for the recovery of money is rendered in favour of the plaintiff, the plaintiff or his legal successors are prevented from instituting an action against the defendant on the *same* cause. In effect, what was considered in the first action, or even that which should have been considered but was not, cannot form the basis of a second action. This does not preclude a second lawsuit based on a *different* cause of action or claim, but the related doctrine of "collateral estoppel" will preclude the parties from relitigating in the second suit based on a different cause of action any issue of fact common to both suits that was actually litigated and necessarily determined in the first suit.

The doctrine of collateral estoppel traditionally had been limited to the parties to the past action. For instance, A, as the driver of B's truck, is involved in an accident with a car driven by C. If A sues C and recovers a judgment because of the negligence of C, the traditional rule has been that in a subsequent suit filed by B against C for damage to the truck, C is not precluded from claiming that he was not negligent since B was not a party to the first suit and would not be bound by the decision in it. Many courts now, however, are holding that even though the same parties are not involved, when the issues are the same and when the defendant has presented a complete and full defense in the first trial, collateral estoppel will now bind him to the finding in the first suit that he was negligent in the occurrence.

Res judicata in civil-law countries

The principle of res judicata is followed in civil-law countries as well, but there are differences. Substantively, res judicata applies generally only in new proceedings between the same parties (or their heirs or successors in interest), and the new proceedings must involve the same type of action (the same bases for the action and the same demand for relief). There is, however, no collateral estoppel, though a judgment that is no longer subject to any form of review (appeal, etc.) is binding as to all procedural rulings. In effect, res judicata becomes procedurally operative only after all normal means of review have been exhausted or the time limit to use them has lapsed.

Enforcement of judgment. All countries have procedures intended to overcome the resistance of a party who fails to comply with the judgment of a court. This is usually known as the enforcement or execution of a judgment. Rules vary greatly, and they are usually highly technical and thus can only be dealt with generally. In the

United States a party who obtains a judgment for a sum of money is entitled normally to avail himself at once of the procedural devices designed to enforce the judgment. The fact that the period for appeal has not yet passed or that an appeal is filed does not, of itself, affect the right to enforce the judgment; the losing party, seeking to postpone enforcement of the judgment pending appeal, must request such relief either from the trial court or the court to which the appeal is taken. Frequently, such a request will be granted if the losing party posts a bond or other security to ensure that the delay in enforcement will not adversely affect the rights of the winning party should the appellate court affirm the judgment of the trial court.

When the judgment results in an order to the losing party to do or refrain from doing some act, the court has the power to enforce the judgment by punishing a party who fails to comply, by a fine or a jail sentence, on the grounds that his disobedience constitutes "contempt of court."

When the judgment results in an award of money damages, the usual procedures for enforcement are the "levy of execution" on property belonging to the defendant or an execution against his income. All property that is not exempt by a specific statute, as well as income earned and debts owed by third persons, are subject to this enforcement process. Exemptions generally are given for such necessities as wearing apparel, tools and implements used in earning a living, and household furniture, and such personal items as wedding rings, family Bibles, and family photographs. The attorney for the party in whose favour the judgment has been rendered or the clerk of the court in which the judgment was obtained issues a command to the sheriff to seize the property. Once the sheriff has taken possession of the property he sells it at public auction and, after deducting his fees, turns over to the judgment creditor only those proceeds of the sale necessary to satisfy the judgment; any excess is returned to the defendant.

Garnishment of wages

The remedy of garnishing the earnings of the defendant, although generally permitted, is accompanied by certain safeguards to prevent oppression. Thus, only if the debtor fails to make payments voluntarily, can his wages be seized, and even then only a limited percentage of the wages.

Rules for the enforcement of judgments in civil-law countries are in some respects similar to those in the United States or other common-law countries, although some differences do exist. Frequently, judgments cannot be enforced by execution or in some other way until all appeals have been heard or until the time for such appeals has run out, but the precise rules differ greatly from country to country and often depend on the subject matter of the action or the court to which an appeal is taken. In Germany, for instance, it is sometimes possible to receive an execution on a judgment still subject to appeal, but the money recovered on execution must be paid into the court clerk's office pending determination of the appeal.

In all countries there are detailed rules exempting certain types of property from seizure, but continental European rules are much less generous toward the debtor than corresponding rules in the United States. In France, for instance, all wages exceeding the equivalent of about $3,000 per year may be seized, whereas in New York no more than 10 percent of wages may ever be taken. If several judgments, which threaten to exceed a debtor's available assets, exist against him, other procedures are available to insure that these assets will be distributed fairly. To some extent, such procedures replace bankruptcy, which in some European countries is available only to businessmen and not to private debtors.

Problems arise in connection with judgments ordering a party to do or not to do a certain act, since contempt procedures, outside of mild fines or jail sentences available to secure the maintenance of order in the courtroom, are generally unknown in Europe. For this reason, Italian judgments will order the performance of a specified act only when, in the case of disobedience by the party, the act can be performed by a substitute appointed by the court. For instance, if the defendant is ordered to tear down a wall and refuses to do so, the court may appoint a contractor to perform this operation. French courts have not limited themselves so narrowly and have developed a kind of civil penalty in order to compel compliance with their judgments.

Costs and disbursements. Generally, the prevailing party recovers not only the amount of the judgment but also the costs and expenses of the suit. These include filing fees, government taxes, witness fees, and the like, but not funds spent in the preparation of the case. In countries like Austria and Germany that regulate the fees of attorneys by an official schedule, such fees are ordinarily recoverable. In countries where such fees are not regulated by schedule, they usually must be borne by the party that has incurred them. In countries such as England or France, where a party is often represented by an agent for litigation (a solicitor, or *avoué*) and a separate attorney to handle oral argument and trial (a barrister, or *avocat*), the fees of the former, but not of the latter, are reimbursable in most situations.

APPEALS AND OTHER METHODS OF REVIEW

A judgment of a court of first instance may be attacked either by appeal to a higher court or by a request for some form of review of the judgment by the court that rendered it. Thus, it is quite generally possible for a defendant who has defaulted to ask a court to reopen the case and hear it on its merits. As noted above, in Anglo-American courts, it is frequently possible to ask for a new trial. In some cases (if, for example, there is newly discovered evidence) procedures analogous to motions for a new trial exist in European countries. In certain countries and in some states of the United States, an appeal of a judgment that is not a final decision can be made in addition to appeals of final decisions.

The appeal process is somewhat different in civil-law and common-law countries. In Europe the appeal from the court of first instance to the intermediate appellate court ordinarily involves a re-examination of the entire case, both the law and the facts, and new evidence frequently can be introduced. An appeal to the supreme or highest court is restricted to matters of law, and the facts found by the lower court are not re-examined. In the Anglo-American system, on the other hand, both the intermediate appellate court and the supreme court examine only the written record created in the court below and do not receive new evidence. Furthermore, review is generally restricted to matters of law, though the scope of review is broader in the intermediate appellate court than the supreme court. Rules of appeal in all systems tend to combine the desire that justice be done and error be corrected with the desire to find some point at which the proceedings will end and judgment will be deemed final.

Common-law appellate procedure. A fundamental principle underlying the function of appellate courts in the United States is the concept that the court serves only to review allegations that errors of law were committed at the trial. In no sense can the appeal be considered a retrial of the entire case. Factual determinations made at a jury trial are not reviewable on appeal except when presented in the context of a legal question. Factual determinations made by a judge in cases tried without a jury are reviewable on appeal, but even in such cases, appellate courts are reluctant to set aside such determinations unless clearly erroneous.

The party appealing the judgment must specify the errors that allegedly occurred at the trial; generally, the appellate court will consider only those points advanced by the appealing party. Moreover, the court will, with few exceptions, refuse to consider an allegation of error, unless the issue had been raised during the initial trial.

Because appellate courts do not hear witnesses or permit the introduction of new evidence on appeal, it is necessary that the record of the trial be made available and include a transcript of the proceedings, original papers, and exhibits. Both parties are required to submit written "briefs" to the court containing legal precedents and the arguments in support of their contentions that error did or did not occur, and each party has an opportunity to present oral legal arguments supporting his position.

Most jurisdictions provide a second appellate court to which a party may appeal from an adverse decision of the first appellate court. The right to such a second appeal is usually limited to certain types of cases raising particularly important issues, and only a small percentage of litigants pursue a second appeal. In the U.S. Supreme Court, a petition to authorize an appeal in certain cases involving the public interest, when it is not available as a matter of right, is known as a petition for a writ of certiorari.

Civil-law appellate procedure. Appeals to intermediate appellate courts from courts of first instance are available quite broadly in Europe, frequently for all judgments exceeding a certain amount (*e.g.*, 2,500 francs, or about $460 U.S., in France) and at times for certain types of judgments, regardless of amount. Since the appeal involves a new hearing of the case, the procedure is essentially similar to that in use in courts of first instance. In the case of a review of a nonfinal judgment, the appellate court frequently limits its review to an examination of the legal correctness of that judgment and then remands the case, so that proceedings in the court below may be completed. Occasionally, appellate courts are authorized to use the occasion of an appeal of a nonfinal judgment in order to decide the entire case themselves. Though an appeal involves a rehearing of the entire case and though parties are, generally speaking, entitled to introduce new evidence, the appeal may not be used to bring forth entirely new claims. The broad availability of a new hearing on appeal encourages appeals to intermediate appellate courts and explains their frequently very heavy case load.

By way of contrast, appeals to the supreme courts of the various countries are generally limited to questions of law. The facts are not ordinarily re-examined, and no new evidence may be introduced. The procedure involves essentially the presentation of written or oral argument by counsel for both sides on the alleged substantive or procedural errors made by the lower court. In several countries, such as France and Italy, the partisan argument by the parties is augmented by independent argument by an officer of the Ministry of Justice representing the law as such. The Court either affirms or reverses the judgment submitted to it for review. If it reverses, it does not, generally, substitute its own judgment for the erroneous judgment below but merely annuls the erroneous judgment and remands the case for new proceedings, frequently to a court different from that from which the case came. Review by supreme courts can usually be sought for all final (and sometimes even nonfinal) decisions of intermediate appellate courts, and frequently also of decisions of courts of first instance if no appeal to an intermediate appellate court is possible. No special permission of the court analogous to the grant of certiorari is ordinarily required. Consequently, case loads are extremely heavy, and to handle them the full court does not usually sit together but instead is divided into panels. In important matters two or more panels may sit together. The court to which the case is remanded is not bound by the view of the law expressed by the appellate court.

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Elements of procedure: Introductory treatments on American law include: W.W. BLUME, *American Civil Procedure* (1955), a discussion of ordinary actions; J.S. BRADWAY, *The History of A Lawsuit* (1958), a basic introduction to civil actions for students; HARVARD LAW REVIEW, *Essays on Civil Procedure* (1961), a collection of a number of valuable essays in the field. Introductory treatments on other countries include: M. CAPPELLETTI and J.M. PERILLO, *Civil Procedure in Italy* (1965), one of the best available treatments in English; and R.B. GINSBURG and A. BRUZELIUS, *Civil Procedure in Sweden* (1965). On the jury system, see: C.W. JOINER, *Civil Justice and the Jury* (1962), an examination of the effectiveness of the jury and related problems; R.W. MILLAR, *Civil Procedure of the Trial Court in Historical Perspective* (1952), a discussion of Anglo-American trial procedure from a historical point of view. For declaratory judgments, see: E.M. BORCHARD, *Declaratory Judgments*, 2nd ed. rev. and enl. (1941), the classic work; and W.H. ANDERSON, C. BOWEN, and G.C. ANDERSON, *Actions for Declaratory Judgments* (1940). On appeals and other methods of review, see: D. KARLEN, *Appellate Courts in the United States and England* (1963), a comparative study.

(P.E.H./Ma.E.O.)

Procellariiformes

The Procellariiformes are a distinct natural order of oceanic birds with about 87 living and 36 fossil species. Of diverse size and range, they are divided into four families: albatrosses, shearwaters, storm petrels, and diving petrels. All are recognizable by their conspicuous tubular nostrils, which project upon the culmen (upper bill), giving the order its alternative name, Tubinares, "tube nosed." The feet are webbed, and the hind toe is vestigial or missing. All species have a characteristic powerful musky odour caused by the excretion of stomach oil; the oil can be used as a defensive discharge through the mouth when the bird is alarmed.

GENERAL FEATURES

Importance to man. The tube-nosed birds have been of considerable local economic importance as a source of protein food, feathers, and oil wherever man has colonized or has been able to raid the coastal and oceanic islands where they breed; this has resulted in the partial or complete extermination locally of certain species. Man has also been responsible for the introduction of predators, such as rats, pigs, and cats. In regions where bird populations have survived, man has continued to harvest the eggs, the plump young birds (at fledging time), or both. Many thousands of slender-billed, or short-tailed, shearwaters (*Puffinus tenuirostris*) are taken on the Bass Strait islands off Tasmania and sold fresh, salted, or deep-frozen as "muttonbirds." The name muttonbird was most likely derived from the use of the flesh as a supplement for mutton by the early settlers of New South Wales. The numbers of muttonbirds now harvested are regulated so as to preserve a substantial breeding stock. "Muttonbirds"

In New Zealand the Maori people have harvested young *titi* (shearwaters of several species) from time immemorial, a right assured them in perpetuity by treaty with Queen Victoria. On the other side of the world, hundreds of Manx shearwaters (*Puffinus puffinus*) were formerly collected for food and as lobster bait on the Welsh islands of Skomer and Skokholm, which are now nature preserves estimated to contain about 200,000 Manx shearwaters and 2,000 storm petrels (*Hydrobates pelagicus*). On the Tristan da Cunha Islands in the South Atlantic, resident islanders harvest the eggs and squab (young) of a large, mixed seabird population, which includes more than 6,000,000 greater shearwaters (*Puffinus gravis*).

The harvesting of northern fulmar petrels (*Fulmarus glacialis*) is an ancient practice among peoples of the cool northern coasts where the birds breed. In Iceland about 50,000 fulmars were taken annually between 1897 and 1925; the occurrence in 1939 of psittacosis (a virulent avian disease) among processors of the birds resulted in prohibition of the use of fulmars for food.