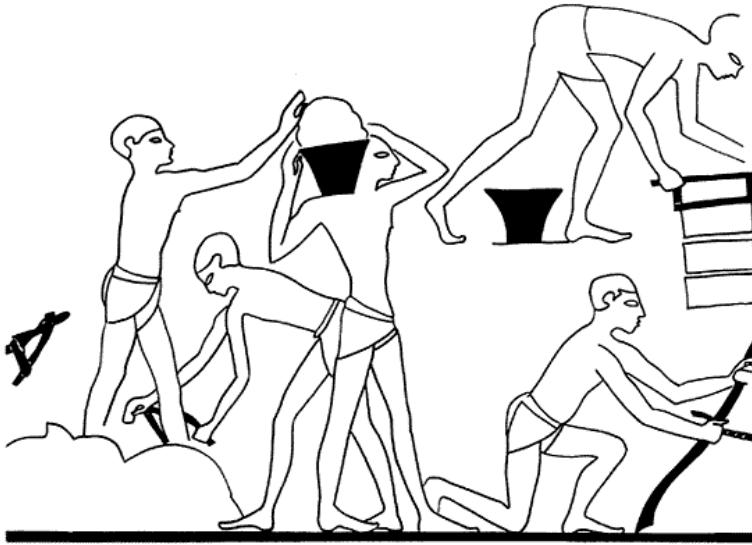


THE
**ESTABLISHMENT OF
CIVILIZATION**

An introduction on the
nature and foundations
of civilization



WILL DURANT



SIMON AND SCHUSTER
NEW YORK: 1941

Preface

I HAVE tried in this book to accomplish the first part of a pleasant assignment which I rashly laid upon myself some twenty years ago: to write a history of civilization. I wish to tell as much as I can, in as little space as I can, of the contributions that genius and labor have made to the cultural heritage of mankind—to chronicle and contemplate, in their causes, character and effects, the advances of invention, the varieties of economic organization, the experiments in government, the aspirations of religion, the mutations of morals and manners, the masterpieces of literature, the development of science, the wisdom of philosophy, and the achievements of art. I do not need to be told how absurd this enterprise is, nor how immodest is its very conception; for many years of effort have brought it to but a fifth of its completion, and have made it clear that no one mind, and no single lifetime, can adequately compass this task. Nevertheless I have dreamed that despite the many errors inevitable in this undertaking, it may be of some use to those upon whom the passion for philosophy has laid the compulsion to try to see things whole, to pursue perspective, unity and understanding through history in time, as well as to seek them through science in space.

I have long felt that our usual method of writing history in separate longitudinal sections—economic history, political history, religious history, the history of philosophy, the history of literature, the history of science, the history of music, the history of art—does injustice to the unity of human life; that history should be written collaterally as well as lineally, synthetically as well as analytically; and that the ideal historiography would seek to portray in each period the total complex of a nation's culture, institutions, adventures and ways. But the accumulation of knowledge has divided history, like science, into a thousand isolated specialties; and prudent scholars have refrained from attempting any view of the whole—whether of the material universe, or of the living past of our race. For the probability of error increases with the scope of the undertaking, and any man who sells his soul to synthesis will be a tragic target for a myriad merry darts of specialist critique. "Consider," said Ptahhotep five thousand years ago, "how thou mayest be opposed by an expert in council. It is foolish to speak on every kind of work." A history of civilization shares the presumptuousness of every philosophical enterprise: it offers the ridiculous spectacle of a fragment expounding the whole. Like philosophy, such a venture has no rational excuse, and is at best but a brave stupidity; but let us hope that, like philosophy, it will always lure some rash spirits into its fatal depths.

The plan of the series is to narrate the history of civilization in five independent parts:

I. *Our Oriental Heritage*: a history of civilization in Egypt and the Near East to the death of Alexander, and in India, China and Japan to the present day; with an introduction on the nature and elements of civilization.

II. *Our Classical Heritage*: a history of civilization in Greece and Rome, and of civilization in the Near East under Greek and Roman domination.

III. *Our Medieval Heritage*: Catholic and feudal Europe, Byzantine

civilization, Mohammedan and Judaic culture in Asia, Africa and Spain, and the Italian Renaissance.

IIIV. *Our European Heritage*: the cultural history of the European states from the Protestant Reformation to the French Revolution.

V. *Our Modern Heritage*: the history of European invention and statesmanship, science and philosophy, religion and morals, literature and art from the accession of Napoleon to our own times.

Our story begins with the Orient, not merely because Asia was the scene of the oldest civilizations known to us, but because those civilizations formed the background and basis of that Greek and Roman culture which Sir Henry Maine mistakenly supposed to be the whole source of the modern mind. We shall be surprised to learn how much of our most indispensable inventions, our economic and political organization, our science and our literature, our philosophy and our religion, goes back to Egypt and the Orient. At this historic moment-when the ascendancy of Europe is so rapidly coming to an end, when Asia is swelling with resurrected life, and the theme of the twentieth century seems destined to be an all-embracing conflict between the East and the West-the provincialism of our traditional histories, which began with Greece and summed up Asia in a line, has become no merely academic error, but a possibly fatal failure of perspective and intelligence. The future faces into the Pacific, and understanding must follow it there.

But how shall an Occidental mind ever understand the Orient? Eight years of study and travel have only made this, too, more evident-that not even a lifetime of devoted scholarship would suffice to initiate a Western student into the subtle character and secret lore of the East. Every chapter, every paragraph in this book will offend or amuse some patriotic or esoteric soul: the orthodox Jew will need all his ancient patience to forgive the pages on Yahveh; the metaphysical Hindu will mourn this superficial scratching of Indian philosophy; and the Chinese or Japanese sage will smile indulgently at these brief and inadequate selections from the wealth of Far Eastern literature and thought. Some of the errors in the chapter on Judea have been corrected by Professor Harry Wolfson of Harvard; Dr. Ananda Coomaraswamy of the Boston Institute of Fine Arts has given the section on India a most painstaking revision, but must not be held responsible for the conclusions I have reached or the errors that remain; Professor H. H. Gowen, the learned Orientalist of the University of Washington, and Upton Close, whose knowledge of the Orient seems inexhaustible, have checked the more flagrant mistakes in the chapters on China and Japan; and Mr. George Sokolsky has given to the pages on contemporary affairs in the Far East the benefit of his first-hand information. Should the public be indulgent enough to call for a second edition of this book, the opportunity will be taken to incorporate whatever further corrections may be suggested by critics, specialists and readers. Meanwhile a weary author may sympathize with Tai Tung, who in the thirteenth century issued his *History of Chinese Writing* with these words: "Were I to await perfection, my book would never be finished."

Since these ear-minded times are not propitious for the popularity of expensive books on remote subjects of interest only to citizens of the world, it may be that the continuation of this series will be delayed by the prosaic necessities of economic life. But if the reception of this adventure in synthesis makes possible an uninterrupted devotion to the undertaking, Part Two should

be ready by the fall of 1940, and its successors should appear, by the grace of health, at five-year intervals thereafter. Nothing would make me happier than to be freed, for this work, from every other literary enterprise. I shall proceed as rapidly as time and circumstance will permit, hoping that a few of my contemporaries will care to grow old with me while learning, and that these volumes may help some of our children to understand and enjoy the infinite riches of their inheritance.

Will Durant
Great Neck, N.Y., March, 1935

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THE ESTABLISHMENT OF CIVILIZATION

"I want to know what were the steps by which men passed from barbarism to civilization." - VOLTAIRE

CHAPTER I

The Conditions of Civilization

*Definition-Geological conditions-Geographical-Economic- Racial-
Psychological-Causes of the decay of civilizations*

CIVILIZATION is social order promoting cultural creation. Four elements constitute it: economic provision, political organization, moral traditions, and the pursuit of knowledge and the arts. It begins where chaos and insecurity end. For when fear is overcome, curiosity and constructiveness are free, and man passes by natural impulse towards the understanding and embellishment of life.

Certain factors condition civilization, and may encourage or impede it. First, geological conditions. Civilization is an interlude between ice ages: at any time the current of glaciation may rise again, cover with ice and stone the works of man, and reduce life to some narrow segment of the earth. Or the demon of earthquake, by whose leave we build our cities, may shrug his shoulders and consume us indifferently.

Second, geographical conditions. The heat of the tropics, and the innumerable parasites that infest them, are hostile to civilization; lethargy and disease, and a precocious maturity and decay, divert the energies from those essentials of life that make civilization, and absorb them in hunger and reproduction; nothing is left for the play of the arts and the mind. Rain is necessary; for water is the medium of life, more important even than the light of the sun; the unintelligible whim of the elements may condemn to desiccation regions that once flourished with empire and industry, like Nineveh or Babylon, or may help to swift strength and wealth cities apparently off the main line of transport and communication, like those of Great Britain or Puget Sound. If the soil is fertile in food or minerals, if rivers offer an easy avenue of exchange, if the coast-line is indented with natural harbors for a commercial fleet, if, above all, a nation lies on the highroad of the world's trade, like Athens or Carthage, Florence or Venice-then geography, though it can never create it, smiles upon civilization, and nourishes it.

Economic conditions are more important. A people may possess ordered institutions, a lofty moral code, and even a flair for the minor forms of art, like the American Indians; and yet if it remains in the hunting stage, if it depends for its existence upon the precarious fortunes of the chase, it will never quite pass from barbarism to civilization. A nomad stock, like the Bedouins of Arabia, may be exceptionally intelligent and vigorous, it may display high qualities of character like courage, generosity and nobility; but without that simple *sine qua non* of culture, a continuity of food, its intelligence will be lavished on the perils of the

hunt and the tricks of trade, and nothing will remain for the laces and frills, the curtsies and amenities, the arts and comforts, of civilization. The first form of culture is agriculture. It is when man settles down to till the soil and lay up provision for the uncertain future that he finds time and reason to be civilized.

Within that little circle of security—a reliable supply of water and food— he builds his huts, his temples and his schools; he invents productive tools, and domesticates the dog, the ass, the pig, at last himself. He learns to work with regularity and order, maintains a longer tenure of life, and transmits more completely than before the mental and moral heritage of his race.

Culture suggests agriculture, but civilization suggests the city. In one aspect civilization is the habit of civility; and civility is the refinement which townsmen, who made the word, thought possible only in the *civitas* or city¹. For in the city are gathered, rightly or wrongly, the wealth and brains produced in the countryside; in the city invention and industry multiply comforts, luxuries and leisure; in the city traders meet, and barter goods and ideas; in that cross-fertilization of minds at the cross-roads of trade intelligence is sharpened and stimulated to creative power. In the city some men are set aside from the making of material things, and produce science and philosophy, literature and art. Civilization begins in the peasant's hut, but it comes to flower only in the towns.

There are no racial conditions to civilization. It may appear on any continent and in any color: at Peking or Delhi, at Memphis or Babylon, at Ravenna or London, in Peru or Yucatan. It is not the great race that makes that makes the people; circumstances geographical and economic create a culture, and the culture creates a type. The Englishman does not make British civilization, it makes him; if he carries it with him wherever he goes, and dresses for dinner in Timbuktu, it is not that he is creating his civilization there anew, but that he acknowledges even there its mastery over his soul. Given like material conditions, and another race would beget like results; Japan reproduces in the twentieth century the history of England in the nineteenth. Civilization is related to race only in the sense that it is often preceded by the slow intermarriage of different stocks, and their gradual assimilation into a relatively homogeneous people (Blood, as distinct from race, may affect a civilization in the sense that a nation may be retarded or advanced by breeding from the biologically (not racially) worse or better strains among the people).

These physical and biological conditions are only prerequisites to civilization; they do not constitute or generate it. Subtle psychological factors must enter into play. There must be political order, even if it be so near to chaos as in Renaissance Florence or Rome; men must feel, by and large, that they need not look for death or taxes at every turn. There must be some unity of language to serve as a medium of mental exchange. Through church, or family, or school, or otherwise, there must be a unifying moral code, some rules of the game of life acknowledged even by those who violate them, and giving to conduct some order and regularity, some direction and stimulus. Perhaps there must also be some unity of basic belief, some faith, supernatural or utopian, that lifts morality from calculation to devotion, and gives life nobility and significance despite our mortal brevity.

¹ The word civilization (Latin *civilis*—pertaining to the *civis*, citizen) is comparatively young. Despite Boswell's suggestion Johnson refused to admit it to his Dictionary in 1772; he preferred to use the word *civility*!

And finally there must be education-some technique, however primitive, for the transmission of culture. Whether through imitation, initiation or instruction, whether through father or mother, teacher or priest, the lore and heritage of the tribe-its language and knowledge, its morals and manners, its technology and arts-must be handed down to the young, as the very instrument through which they are turned from animals into men.

The disappearance of these conditions-sometimes of even one of them may destroy a civilization. A geological cataclysm or a profound climatic change; an uncontrolled epidemic like that which wiped out half the population of the Roman Empire under the Antonines, or the Black Death that helped to end the Feudal Age; the exhaustion of the land, or the ruin of agriculture through the exploitation of the country by the town, resulting in a precarious dependence upon foreign food supplies; the failure of natural resources, either of fuels or of raw materials; a change in trade routes, leaving a nation off the main line of the world's commerce; mental or moral decay from the strains, stimuli and contacts of urban life, from the breakdown of traditional sources of social discipline and the inability to replace them; the weakening of the stock by a disorderly sexual life, or by an epicurean, pessimist, or quietist philosophy; the decay of leadership through the infertility of the able, and the relative smallness of the families that might bequeath most fully the cultural inheritance of the race; a pathological concentration of wealth, leading to class wars, disruptive revolutions, and financial exhaustion: these are some of the ways in which a civilization may die. For civilization is not something inborn or imperishable; it must be acquired anew by every generation, and any serious interruption in its financing or its transmission may bring it to an end. Man differs from the beast only by education, which may be defined as the technique of transmitting civilization.

Civilizations are the generations of the racial soul. As family-rearing, and then writing, bound the generations together, handing down the lore of the dying to the young, so print and commerce and a thousand ways of communication may bind the civilizations together, and preserve for future cultures all that is of value for them in our own. Let us, before we die, gather up our heritage, and offer it to our children.

The Economic Elements of Civilization²

IN one important sense the "savage," too, is civilized, for he carefully transmits to his children the heritage of the tribe—that complex of economic, political, mental and moral habits and institutions which it has developed in its efforts to maintain and enjoy itself on the earth. It is impossible to be scientific here; for in calling other human beings "savage" or "barbarous" we may be expressing no objective fact, but only our fierce fondness for ourselves, and our timid shyness in the presence of alien ways. Doubtless we underestimate these simple peoples, who have so much to teach us in hospitality and morals; if we list the bases and constituents of civilization we shall find that the naked nations invented or arrived at all but one of them, and left nothing for us to add except embellishments and writing. Perhaps they, too, were once civilized, and desisted from it as a nuisance. We must make sparing use of such terms as "savage" and "barbarous" in referring to our "contemporaneous ancestry." Preferably we shall call "primitive" all tribes that make little or no provision for un-productive days, and little or no use of writing. In contrast, the civilized may be defined as literate providers.

I. FROM HUNTING TO TILLAGE

Primitive improvidence-Beginnings of provision-Hunting and fishing-Herding-The domestication of animals-Agriculture-Food-Cooking-Cannibalism

"Three meals a day are a highly advanced institution. Savages gorge themselves or fast. The wilder tribes among the American Indians considered it weak-kneed and unseemly to preserve food for the next day." The natives of Australia are incapable of any labor whose reward is not immediate; every Hottentot is a gentleman of leisure; and with the Bush-men of Africa it is always "either a feast or a famine."² There is a mute wisdom in this improvidence, as in many "savage" ways. The moment man begins to take thought of the morrow he passes out of the Garden of Eden into the vale of anxiety; the pale cast of worry settles down upon him, greed is sharpened, property begins, and the good cheer of the "thoughtless" native disappears. The American Negro is making this transition today. "Of what are you thinking?" Peary asked one of his Eskimo guides. "I do not have to think," was the answer; "I have plenty of meat."

² Despite recent high example to the contrary, the word *civilization* will be used in this volume to mean social organization, moral order, and cultural activity; while *culture* will mean, according to the context, either the practice of manners and the arts, or the sum-total of a people's institutions, customs and arts. It is in the latter sense that the word *culture* will be used in reference to primitive or prehistoric societies.

Not to think unless we have to—there is much to be said for this as the summation of wisdom.

Nevertheless, there were difficulties in this carelessness, and those organisms that outgrew it came to possess a serious advantage in the struggle for survival. The dog that buried the bone which even a canine appetite could not manage, the squirrel that gathered nuts for a later feast, the bees that filled the comb with honey, the ants that laid up stores for a rainy day—these were among the first creators of civilization. It was they, or other subtle creatures like them, who taught our ancestors the art of providing for tomorrow out of the surplus of today, or of preparing for winter in summer's time of plenty.

With what skill those ancestors ferreted out, from land and sea, the food that was the basis of their simple societies! They grubbed edible things from the earth with bare hands; they imitated or used the claws and tusks of the animals, and fashioned tools out of ivory, bone or stone; they made nets and traps and snares of rushes or fibre, and devised innumerable artifices for fishing and hunting their prey. The Polynesians had nets a thousand ells long, which could be handled only by a hundred men; in such ways economic provision grew hand in hand with political organization, and the united quest for food helped to generate the state. The Tlingit fisherman put upon his head a cap like the head of a seal, and hiding his body among the rocks, made a noise like a seal; seals came toward him, and he speared them with the clear conscience of primitive war. Many tribes threw narcotics into the streams to stupefy the fish into cooperation with the fishermen; the Tahitians, for example, put into the water an intoxicating mixture prepared from the *buteo* nut or the *bora* plant; the fish, drunk with it, floated leisurely on the surface, and were caught at the anglers' will. Australian natives, swimming under water while breathing through a reed, pulled ducks beneath the surface by the legs, and gently held them there till they were pacified. The Tarahumaras caught birds by stringing kernels on tough fibres half buried under the ground; the birds ate the kernels, and the Tarahumaras ate the birds.

Hunting is now to most of us a game, whose relish seems based upon some mystic remembrance, in the blood, of ancient days when to hunter as well as hunted it was a matter of life and death. For hunting was not merely a quest for food, it was a war for security and mastery, a war beside which all the wars of recorded history are but a little noise. In the jungle man still fights for his life, for though there is hardly an animal that will attack him unless it is desperate for food or cornered in the chase, yet there is not always food for all, and sometimes only the fighter, or the breeder of fighters, is allowed to eat. We see in our museums the relics of that war of the species in the knives, clubs, spears, arrows, lassos, bolas, lures, traps, boomerangs and slings with which primitive men won possession of the land, and prepared to transmit to an ungrateful posterity the gift of security from every beast except man. Even today, after all these wars of elimination, how many different populations move over the earth! Sometimes, during a walk in the woods, one is awed by the variety of languages spoken there, by the myriad species of insects, reptiles, carnivores and birds; one feels that man is an interloper on this crowded scene, that he is the object of universal dread and endless hostility. Some day, perhaps, these chattering quadrupeds, these ingratiating centipedes, these insinuating bacilli, will devour man and all his works, and free the planet from this marauding biped, these mysterious and unnatural weapons, these careless feet!

Hunting and fishing were not stages in economic development, they were modes of activity destined to survive into the highest forms of civilized society. Once the center of life, they are still its hidden foundations; behind our literature and philosophy, our ritual and art, stand the stout killers of Packingtown. We do our hunting by proxy, not having the stomach for honest killing in the fields; but our memories of the chase linger in our joyful pursuit of anything weak or fugitive, and in the games of our children—even in the word *game*. In the last analysis civilization is based upon the food supply. The cathedral and the capitol, the museum and the concert chamber, the library and the university are the facade; in the rear are the shambles.

To live by hunting was not original; if man had confined himself to that he would have been just another carnivore. He began to be human when out of the uncertain hunt he developed the greater security and continuity of the pastoral life. For this involved advantages of high importance: the domestication of animals, the breeding of cattle, and the use of milk. We do not know when or how domestication began—perhaps when the helpless young of slain beasts were spared and brought to the camp as playthings for the children.' The animal continued to be eaten, but not so soon; it acted as a beast of burden, but it was accepted almost democratically into the society of man; it became his comrade, and formed with him a community of labor and residence. The miracle of reproduction was brought under control, and two captives were multiplied into a herd. Animal milk released women from prolonged nursing, lowered infantile mortality, and provided a new and dependable food. Population increased, life became more stable and orderly, and the mastery of that timid *parvenu*, man, became more secure on the earth.

Meanwhile woman was making the greatest economic discovery of all—the bounty of the soil. While man hunted she grubbed about the tent or hut for whatever edible things lay ready to her hand on the ground. In Australia it was understood that during the absence of her mate on the chase the wife would dig for roots, pluck fruit and nuts from the trees, and collect honey, mushrooms, seeds and natural grains.' Even today, in certain tribes of Australia, the grains that grow spontaneously out of the earth are harvested without any attempt to separate and sow the seed; the Indians of the Sacramento River Valley never advanced beyond this stage. We shall never discover when men first noted the function of the seed, and turned collecting into sowing; such beginnings are the mysteries of history, about which we may believe and guess, but cannot know. It is possible that when men began to collect unplanted grains, seeds fell along the way between field and camp, and suggested at last the great secret of growth. The Juangs threw the seeds together into the ground, leaving them to find their own way up. The natives of Borneo put the seed into holes which they dug with a pointed stick as they walked the fields." The simplest known culture of the earth is with this stick or "digger." In Madagascar fifty years ago the traveler could still see women armed with pointed sticks, standing in a row like soldiers, and then, at a signal, digging their sticks into the ground, turning over the soil, throwing in the seed, stamping the earth flat, and passing on to another furrow. The second stage in complexity was culture with the hoe: the digging stick was tipped with bone, and fitted with a crosspiece to receive the pressure of the foot. When the Conquistadores arrived in Mexico they found that the Aztecs knew no other tool of tillage than the hoe. With the domestication of animals and the forging of metals a heavier implement could be used; the hoe was enlarged into a plough, and

the deeper turning of the soil revealed a fertility in the earth that changed the whole career of man. Wild plants were domesticated, new varieties were developed, old varieties were improved.

Finally nature taught man the art of provision, the virtue of prudence, the concept of time. Watching woodpeckers storing acorns in the trees, and the bees storing honey in hives, man conceived-perhaps after millenniums of improvident savagery-the notion of laying up food for the future. He found ways of preserving meat by smoking it, salting it, freezing it; better still, he built granaries secure from rain and damp, vermin and thieves, and gathered food into them for the leaner months of the year. Slowly it became apparent that agriculture could provide a better and steadier food supply than hunting. With that realization man took one of the three steps that led from the beast to civilization-speech, agriculture, and writing.

It is not to be supposed that man passed suddenly from hunting to tillage. Many tribes, like the American Indians, remained permanently becalmed in the transition-the men given to the chase, the women tilling the soil. Not only was the change presumably gradual, but it was never complete. Man merely added a new way of securing food to an old way; and for the most part, throughout his history, he has preferred the old food to the new. We picture early man experimenting with a thousand products of the earth to find, at much cost to his inward comfort, which of them could be eaten safely; mingling these more and more with the fruits and nuts, the flesh and fish he was accustomed to, but always yearning for the booty of the chase. Primitive peoples are ravenously fond of meat, even when they live mainly on cereals, vegetables and milk. If they come upon the carcass of a recently dead animal the result is likely to be a wild debauch. Very often no time is wasted on cooking; the prey is eaten raw, as fast as good teeth can tear and devour it; soon nothing is left but the bones. Whole tribes have been known to feast for a week on a whale thrown up on the shore." Though the Fuegians can cook, they prefer their meat raw; when they catch a fish they kill it by biting it behind the gills, and then consume it from head to tail without further ritual... The uncertainty of the food supply made these nature peoples almost literally omnivorous: shellfish, sea urchins, frogs, toads, snails, mice, rats, spiders, earthworms, scorpions, moths, centipedes, locusts, caterpillars, lizards, snakes, boas, dogs, horses, roots, lice, insects, larva, the eggs of reptiles and birds-there is not one of these but was somewhere a delicacy, or even a *piece de resistance*, to primitive men." Some tribes are expert hunters of ants; others dry insects in the sun and then store them for a feast; others pick the lice out of one another's hair, and eat them with relish; if a great number of lice can be gathered to make a *petite marmite*; they are devoured with shouts of joy, as enemies of the human race." The menu of the lower hunting tribes hardly differs from that of the higher apes."

The discovery of fire limited this indiscriminate voracity, and cooperated with agriculture to free man from the chase. Cooking broke down the cellulose and starch of a thousand plants indigestible in their raw state, and man turned more and more to cereals and vegetables as his chief reliance. At the same time cooking, by softening tough foods, reduced the need of chewing, and began that decay of the teeth which is one of the insignia of civilization.

To all the varied articles of diet that we have enumerated, man added the greatest delicacy of all-his fellowman. Cannibalism was at one time practically universal; it has been found in nearly all primitive tribes, and among

such later peoples as the Irish, the Iberians, the Picts, and the eleventh-century Danes." Among many tribes human flesh was a staple of trade, and funerals were unknown. In the Upper Congo living men, women and children were bought and sold frankly as articles of food; on the island of New Britain human meat was sold in shops as butcher's meat is sold among ourselves; and in some of the Solomon Islands human victims, preferably women, were fattened for a feast like pigs... The Fuegians ranked women above dogs because, they said, "dogs taste of otter." In Tahiti an old Polynesian chief explained his diet to Pierre Loti: "The white man, when well roasted, tastes like a ripe banana." The Fijians, however, complained that the flesh of the whites was too salty and tough, and that a European sailor was hardly fit to eat; a Polynesian tasted better.

What was the origin of this practice? There is no surety that the custom arose, as formerly supposed, out of a shortage of other food; if it did, the taste once formed survived the shortage, and became a passionate predilection. Everywhere among nature peoples blood is regarded as a delicacy-never with horror; even primitive vegetarians take to it with gusto. Human blood is constantly drunk by tribes otherwise kindly and generous; sometimes as medicine, sometimes as a rite or covenant, often in the belief that it will add to the drinker the vital force of the victim. No shame was felt in preferring human flesh; primitive man seems to have recognized no distinction in morals between eating men and eating other animals. In Melanesia the chief who could treat his friends to a dish of roast man soared in social esteem. "When I have slain an enemy," explained a Brazilian philosopher-chief, "it is surely better to eat him than to let him waste - - - The worst is not to be eaten, but to die; if I am killed it is all the same whether my tribal enemy eats me or not. But I could not think of any game that would taste better than he would . . . You whites are really too dainty."

Doubtless the custom had certain social advantages. It anticipated Dean Swift's plan for the utilization of superfluous children, and it gave the old an opportunity to die usefully. There is a point of view from which funerals seem an unnecessary extravagance. To Montaigne it appeared more barbarous to torture a man to death under the cover of piety, as was the mode of his time, than to roast and eat him after he was dead. We must respect one another's delusions.

II. THE FOUNDATIONS OF INDUSTRY

Fire-Primitive Tools-Weaving and pottery-Building and transport-Trade and finance

Human began with speech, and civilization with agriculture, industry began with fire. Man did not invent it; probably nature produced the marvel for him by the friction of leaves or twigs, a stroke of lightning, or a chance union of chemicals; man merely had the saving wit to imitate nature, and to improve upon her. He put the wonder to a thousand uses. First, perhaps, he made it serve as a torch to conquer his fearsome enemy, the dark; then he used it for warmth, and moved more freely from his native tropics to less enervating zones, slowly making the planet human; then he applied it to metals, softening them, tempering them, and combining them into forms stronger and suppler than those in which they had come to his hand. So beneficent and strange was it that fire always remained a miracle to primitive man, fit to be worshiped as a god; he offered it countless ceremonies of devotion, and made it the center or focus (which is Latin

for hearth) of his life and home; he carried it carefully with him as he moved from place to place in his wanderings, and would not willingly let it die. Even the Romans punished with death the careless vestal virgin who allowed the sacred fire to be extinguished.

Meanwhile, in the midst of hunting, herding and agriculture, invention was busy, and the primitive brain was racking itself to find mechanical answers to the economic puzzles of life. At first man was content, apparently, to accept what nature offered him—the fruits of the earth as his food, the skins and furs of the animals as his clothing, the caves in the hillsides as his home. Then, *perhaps* (for most history is guessing, and the rest is prejudice), he imitated the tools and industry of the animal: he saw the monkey flinging rocks and fruit upon his enemies, or breaking open nuts and oysters with a stone; he saw the beaver building a dam, the birds making nests and bowers, the chimpanzees raising something very like a hut. He envied the power of their claws, teeth, tusks and horns, and the toughness of their hides; and he set to work to fashion tools and weapons that would resemble and rival these. Man, said Franklin, is a tool-using animal;’ but this, too, like the other distinctions on which we plume ourselves, is only a difference of degree.

Many tools lay potential in the plant world that surrounded primitive man. From the bamboo he made shafts, knives, needles and bottles; out of branches he made tongs, pincers and vices; from bark and fibres he wove cord and clothing of a hundred kinds. Above all, he made himself a stick. It was a modest invention, but its uses were so varied that man always looked upon it as a symbol of power and authority, from the wand of the fairies and the staff of the shepherd to the rod of Moses or Aaron, the ivory cane of the Roman consul, the *lituus* of the augurs, and the mace of the magistrate or the king. In agriculture the stick became the hoe; in war it became the lance or javelin or spear, the sword or bayonet. Again, man used the mineral world, and shaped stones into a museum of arms and implements: hammers, anvils, kettles, scrapers, arrow-heads, saws, planes, wedges, levers, axes and drills. From the animal world he made ladles, spoons, vases, gourds, plates, cups, razors and hooks out of the shells of the shore, and tough or dainty tools out of the horn or ivory, the teeth and bones, the hair and hide of the beasts. Most of these fashioned articles had handles of wood, attached to them in cunning ways, bound with braids of fibre or cords of animal sinew, and occasionally glued with strange mixtures of blood. The ingenuity of primitive men probably equaled—perhaps it surpassed—that of the average modern man; we differ from them through the social accumulation of knowledge, materials and tools, rather than through innate superiority of brains. Indeed, nature men delight in mastering the necessities of a situation with inventive wit.

It was a favorite game among the Eskimos to go off into difficult and deserted places, and rival one another in devising means for meeting the needs of a life unequipped and unadorned.

This primitive skill displayed itself proudly in the art of weaving. Here, too, the animal showed man the way. The web of the spider, the nest of the bird, the crossing and texture of fibres and leaves in the natural embroidery of the woods, set an example so obvious that in all probability weaving was one of the earliest arts of the human race. Bark, leaves and grass fibres were woven into clothing, carpets and tapestry, sometimes so excellent that it could not be rivaled today, even with the resources of contemporary machinery. Aleutian women may spend a year in weaving one

robe. The blankets and garments made by the North American Indians were richly ornamented with fringes and embroideries of hairs and tendon-threads dyed in brilliant colors with berry juice; colors "so alive," says Father Theodor, "that ours do not seem even to approach them."... Again art began where nature left off; the bones of birds and fishes, and the slim shoots of the bamboo tree, were polished into needles, and the tendons of animals were drawn into threads delicate enough to pass through the eye of the finest needle today. Bark was beaten into mats and cloths, skins were dried for clothing and shoes, fibres were twisted into the strongest yarn, and supple branches and colored filaments were woven into baskets more beautiful than any modern forms.

Akin to basketry, perhaps born of it, was the art of pottery. Clay placed upon wickerwork to keep the latter from being burned, hardened into a fireproof shell which kept its form when the wickerwork was taken away; this *may have been* the first stage of a development that was to culminate in the perfect porcelains of China. Or perhaps some lumps of clay, baked and hardened by the sun, suggested the ceramic art; it was but a step from this to substitute fire for the sun, and to form from the earth myriad shapes of vessels for every use—for cooking, storing and transporting, at last for luxury and ornament. Designs imprinted by finger-nail or tool upon the wet clay were one of the first forms of art, and perhaps one of the origins of writing.

Out of sun-dried clay primitive tribes made bricks and adobe, and dwelt, so to speak, in pottery. But that was a late stage of the building art, binding the mud hut of the "savage" in a chain of continuous development with the brilliant tiles of Nineveh and Babylon. Some primitive peoples, like the Veddahs of Ceylon, had no dwellings at all, and were content with the earth and the sky; some, like the Tasmanians, slept in hollow trees; some, like the natives of New South Wales, lived in caves; others, like the Bush-men, built here and there a wind-shelter of branches, or, more rarely, drove piles into the soil and covered their tops with moss and twigs. From such wind-shelters, when sides were added, evolved the hut, which is found among the natives of Australia in all its stages from a tiny cottage of branches, grass and earth large enough to cover two or three persons, to great huts housing thirty or more. The nomad hunter or herdsman preferred a tent, which he could carry wherever the chase might lead him. The higher type of nature peoples, like the American Indian, built with wood; the Iroquois, for example, raised, out of timber still bearing the bark, sprawling edifices five hundred feet long, which sheltered many families. Finally, the natives of Oceania made real houses of carefully cut boards, and the evolution of the wooden dwelling was complete.

Only three further developments were needed for primitive man to create all the essentials of economic civilization: the mechanisms of transport, the processes of trade, and the medium of exchange. The porter carrying his load from a modern plane pictures the earliest and latest stages in the history of transportation. In the beginning, doubtless, man was his own beast of burden, unless he was married; to this day, for the most part, in southern and eastern Asia, man is wagon and donkey and all. Then he invented ropes, levers, and pulleys; he conquered and loaded the animal; he made the first sledge by having his cattle draw along the ground long branches bearing his goods; he put logs as rollers under the sledge; he cut cross-sections of the log, and made the

greatest of all mechanical inventions, the wheel; he put wheels under the sledge and made a cart. Other logs he bound together as rafts, or dug into canoes; and the streams became his most convenient avenues of transport. The American Indians, content with this device, never used the wheel. By land he went first through trackless fields and hills, then by trails, at last by roads. He studied the stars, and guided his caravans across mountains and deserts by tracing his route in the sky. He paddled, rowed or sailed his way bravely from island to island, and at last spanned oceans to spread his modest culture from continent to continent. Here, too, the main problems were solved before written history began.

Since human skills and natural resources are diversely and unequally distributed, a people may be enabled, by the development of specific talents, or by its proximity to needed materials, to produce certain articles more cheaply than its neighbors. Of such articles it makes more than it consumes, and offers its surplus to other peoples in exchange for their own; this is the origin of trade. The Chibcha Indians of Colombia exported the rock salt that abounded in their territory, and received in return the cereals that could not be raised on their barren soil. Certain American Indian villages were almost entirely devoted to making arrow-heads; some in New Guinea to making pottery; some in Africa to blacksmithing, or to making boats or lances. Such specializing tribes or villages sometimes acquired the names of their industry (Smith, Fisher, Potter . . .), and these names were in time attached to specializing families. Trade in surpluses was at first by an interchange of gifts; even in our calculating days a present (if only a meal) sometimes precedes or seals a trade. The exchange was facilitated by war, robbery, tribute, fines, and compensation; goods had to be kept moving! Gradually an orderly system of barter grew up, and trading posts, markets and bazaars were established occasionally, then periodically, then permanently—where those who had some article in excess might offer it for some article of need.

For a long time commerce was purely such exchange, and centuries passed before a circulating medium of value was invented to quicken trade. A Dyak might be seen wandering for days through a bazaar, with a ball of beeswax in his hand, seeking a customer who could offer him in return something that he might more profitably use." The earliest mediums of exchange were articles universally in demand, which anyone would take in payment: dates, salt, skins, furs, ornaments, implements, weapons; in such traffic two knives equaled one pair of stockings, all three equaled a blanket, all four equaled a gun, all five equaled a horse; two elk-teeth equaled one pony, and eight ponies equaled a wife." There is hardly any thing that has not been employed as money by some people at some time: beans, fish-hooks, shells, pearls, beads, cocoa seeds, tea, pepper, at last sheep, pigs, cows, and slaves. Cattle were a convenient standard of value and medium of exchange among hunters and herders; they bore interest through breeding, and they were easy to carry, since they transported themselves. Even in Homer's days men and things were valued in terms of cattle: the armor of Diomedes was worth nine head of cattle, a skilful slave was worth four. The Romans used kindred *words-pecus* and *pecunia-for* cattle and money, and placed the image of an ox upon their early coins. Our own words *capital*, *chattel* and *cattle* go back through the French to the Latin *capitale*, meaning property: and this in turn derives from *caput*, meaning head—i.e., of cattle. When metals were mined they slowly replaced other articles as standards of

value; copper, bronze, iron, finally-because of their convenient representation of great worth in little space and weight-silver and gold, became the money of mankind. The advance from token goods to a metallic currency does not seem to have been made by primitive men; it was left for the historic civilizations to invent coinage and credit, and so, by further facilitating the exchange of surpluses, to increase again the wealth and comfort of man.’⁶

III. ECONOMIC ORGANIZATION

Primitive communism-Causes of its disappearance-Origins of private property-Slavery-Classes

Trade was the great disturber of the primitive world, for until it came, bringing money and profit in its wake, there was no property, and therefore little government. In the early stages of economic development property was limited for the most part to things personally used; the property sense applied so strongly to such articles that they (even the wife) were often buried with their owner; it applied so weakly to things not personally used that in their case the sense of property, far from being innate, required perpetual reinforcement and inculcation.

Almost everywhere, among primitive peoples, land was owned by the community. The North American Indians, the natives of Peru, the Chittagong Hill tribes of India, the Borneans and South Sea Islanders seem to have owned and tilled the soil in common, and to have shared the fruits together. "The land," said the Omaha Indians, "is like water and wind- what cannot be sold." In Samoa the idea of selling land was unknown prior to the coming of the white man. Professor Rivers found communism in land still existing in Melanesia and Polynesia; and in inner Liberia it may be observed today...

Only less widespread was communism in food. It was usual among "savages" for the man who had food to share it with the man who had none, for travelers to be fed at any home they chose to stop at on their way, and for communities harassed with drought to be maintained by their neighbors. If a man sat down to his meal in the woods he was expected to call loudly for some one to come and share it with him, before he might justly eat alone... When Turner told a Samoan about the poor in London the "savage" asked in astonishment: "How is it? No food? No friends? No house to live in? Where did he grow? Are there no houses belonging to his friends?" The hungry Indian had but to ask to receive; no matter how small the supply was, food was given him if he needed it; "no one can want food while there is corn anywhere in the town." Among the Hottentots it was the custom for one who had more than others to share his surplus till all were equal. White travelers in Africa before the advent of civilization noted that a present of food or other valuables to a "black man" was at once distributed; so that when a suit of clothes was given to one of them the donor soon found the recipient wearing the hat, a friend the trousers, another friend the coat. The Eskimo hunter had no personal right to his catch; it had to be divided among the inhabitants of the village, and tools and provisions were the common property of all. The North American Indians were described by Captain Carver as "strangers to all distinctions of property, except in the articles of domestic use.... They are extremely liberal to each other, and supply the deficiencies of their friends with any superfluity of their own." "What is extremely surprising," reports a missionary, "is to see them treat one another with

a gentleness and consideration which one does not find among common people in the most civilized nations. This, doubt- less, arises from the fact that the words 'mine' and 'thine,' which St. Chrysostom says extinguish in our hearts the fire of charity and kindle that of greed, are unknown to these savages." "I have seen them," says another observer, "divide game among themselves when they sometimes had many shares to make; and cannot recollect a single instance of their falling into a dispute or finding fault with the distribution as being unequal or otherwise objectionable. They would rather lie down themselves on an empty stomach than have it laid to their charge that they neglected to satisfy the needy. . . They look upon themselves as but one great family."

Why did this primitive communism disappear as men rose to what we, with some partiality, call civilization? Sumner believed that communism proved unbiological, a handicap in the struggle for existence; that it gave insufficient stimulus to inventiveness, industry and thrift; and that the failure to reward the more able, and punish the less able, made for a leveling of capacity which was hostile to growth or to successful competition with other groups." Loskiel reported some Indian tribes of the northeast as "so lazy that they plant nothing themselves, but rely entirely upon the expectation that others will not refuse to share their produce with them. Since the industrious thus enjoy no more of the fruits of their labor than the idle, they plant less every year.".. Darwin thought that the perfect equality among the Fuegians was fatal to any hope of their becoming civilized;. or, as the Fuegians might have put it, civilization would have been fatal to their equality. Communism brought a certain security to all who survived the diseases and accidents due to the poverty and ignorance of primitive society; but it did not lift them out of that poverty. Individualism brought wealth, but it brought, also, insecurity and slavery; it stimulated the latent powers of superior men, but it intensified the corn- petition of life, and made men feel bitterly a poverty which, when all shared it alike, had seemed to oppress none.³

³ Perhaps one reason why communism tends to appear chiefly at the beginning of civilizations is that it flourishes most readily in times of dearth, when the common danger of starvation fuses the individual into the group. When abundance comes, and the danger subsides, social cohesion is lessened, and individualism increases; communism ends where luxury begins. As the life of a society becomes more complex, and the division of labor differentiates men into diverse occupations and trades, it becomes more and more unlikely that all these services will be equally valuable to the group; inevitably those whose greater ability enables them to perform the more vital functions will take more than their equal share of the rising wealth of the group. Every growing civilization is a scene of multiply- ing inequalities; the natural differences of human endowment unite with differences of opportunity to produce artificial differences of wealth and power; and where no laws or despots suppress these artificial inequalities they reach at last a bursting point where the poor have nothing to lose by violence, and the chaos of revolution levels men again into a community of destitution.

Hence the dream of communism lurks in every modern society as a racial memory of a simpler and more equal life; and where inequality or insecurity rises beyond sufferance, men welcome a return to a condition which they idealize by recalling its equality and forgetting its poverty. Periodically the land gets itself redistributed, legally or not, whether by the Gracchi in Rome, the Jacobins in France, or the Communists in Russia; periodically wealth is redistributed, whether by the violent confiscation of property, or by confiscatory taxation of incomes and bequests. Then the race for wealth, goods and power begins again, and the

Communism could survive more easily in societies where men were always on the move, and danger and want were ever present. Hunters and herders had no need of private property in land; but when agriculture became the settled life of men it soon appeared that the land was most fruitfully tilled when the rewards of careful husbandry accrued to the family that had provided it. Consequently—since there is a natural selection of institutions and ideas as well as of organisms and groups—the passage from hunting to agriculture brought a change from tribal property to family property; the most economical unit of production became the unit of ownership. As the family took on more and more a patriarchal form, with authority centralized in the oldest male, property became increasingly individualized, and personal bequest arose. Frequently an enterprising individual would leave the family haven, adventure beyond the traditional boundaries, and by hard labor reclaim land from the forest, the jungle or the marsh; such land he guarded jealously as his own, and in the end society recognized his right, and another form of individual property began.... As the pressure of population increased, and older lands were exhausted, such reclamation went on in a widening circle, until, in the more complex societies, individual ownership became the order of the day. The invention of money cooperated with these factors by facilitating the accumulation, transport and transmission of property. The old tribal rights and traditions reasserted themselves in the technical ownership of the soil by the village community or the king, and in periodical redistributions of the land; but after an epoch of natural oscillation between the old and the new, private property established itself definitely as the basic economic institution of historical society.

Agriculture, while generating civilization, led not only to private property but to slavery. In purely hunting communities slavery had been unknown; the hunter's wives and children sufficed to do the menial work. The men alternated between the excited activity of hunting or war, and the exhausted lassitude of satiety or peace. The characteristic laziness of primitive peoples had its origin, presumably, in this habit of slowly recuperating from the fatigue of battle or the chase; it was not so much laziness as rest. To transform this spasmodic activity into regular work two things were needed: the routine of tillage, and the organization of labor.

Such organization remains loose and spontaneous where men are working for themselves; where they work for others, the organization of labor depends in the last analysis upon force. The rise of agriculture and the inequality of men led to the employment of the socially weak by the socially strong; not till then did it occur to the victor in war that the only good prisoner is a live one. Butchery and cannibalism lessened, slavery grew." It was a great moral improvement when men ceased to kill or eat their fellowmen, and merely made them slaves. A similar development on a larger scale may be seen today, when a nation victorious in war no longer exterminates the enemy, but enslaves it with

pyramid of ability takes form once more; under whatever laws may be enacted the abler man manages somehow to get the richer soil, the better place, the lion's share; soon he is strong enough to dominate the state and rewrite or interpret the laws; and in time the inequality is as great as before. In this aspect all economic history is the slow heart-beat of the social organism, a vast systole and diastole of naturally concentrating wealth and naturally explosive revolution.

indemnities. Once slavery had been established and had proved profitable, it was extended by condemning to it defaulting debtors and obstinate criminals, and by raids undertaken specifically to capture slaves. War helped to make slavery, and slavery helped to make war.

Probably it was through centuries of slavery that our race acquired its traditions and habits of toil. No one would do any hard or persistent work if he could avoid it without physical, economic or social penalty. Slavery became part of the discipline by which man was prepared for industry. Indirectly it furthered civilization, in so far as it increased wealth and-for a minority-created leisure. After some centuries men took it for granted; Aristotle argued for slavery as natural and inevitable, and St. Paul gave his benediction to what must have seemed, by his time, a divinely ordained institution.

Gradually, through agriculture and slavery, through the division of labor and the inherent diversity of men, the comparative equality of natural society was replaced by inequality and class divisions. "In the primitive group we find as a rule no distinction between slave and free, no serfdom, no caste, and little if any distinction between chief and followers."⁴ Slowly the increasing complexity of tools and trades subjected the unskilled or weak to the skilled or strong; every invention was a new weapon in the hands of the strong, and further strengthened them in their mastery and use of the weak⁴. Inheritance added superior opportunity to superior possessions, and stratified once homogeneous societies into a maze of classes and castes. Rich and poor became disruptively conscious of wealth and poverty; the class war began to run as a red thread through all history; and the state arose as an indispensable instrument for the regulation of classes, the protection of property, the waging of war, and the organization of peace.

⁴ So in our time that Mississippi of inventions which we call the Industrial Revolution has enormously intensified the natural inequality of men.

CHAPTER III

The Political Elements of Civilization

I. THE ORIGINS OF GOVERNMENT

The unsocial instinct-Primitive anarchism- The clan and the tribe-The king-War

MAN is not willingly a political animal. The human male associates with his fellows less by desire than by habit, imitation, and the compulsion of circumstance; he does not love society so much as he fears solitude. He combines with other men because isolation endangers him, and because there are many things that can be done better together than alone; in his heart he is a solitary individual, pitted heroically against the world. If the average man had had his way there would probably never have been any state. Even today he resents it, classes death with taxes, and yearns for that government which governs least. If he asks for many laws it is only because he is sure that his neighbor needs them; privately he is an unphilosophical anarchist, and thinks laws in his own case superfluous.

In the simplest societies there is hardly any government. Primitive hunters tend to accept regulation only when they join the hunting pack and prepare for action. The Bushmen usually live in solitary families; the Pygmies of Africa and the simplest natives of Australia admit only temporarily of political organization, and then scatter away to their family groups; the Tasmanians had no chiefs, no laws, no regular government; the Veddahs of Ceylon formed small circles according to family relationship, but had no government; the Kubus of Sumatra "live without men in authority," every family governing itself; the Fuegians are seldom more than twelve together; the Tungus associate sparingly in groups of ten tents or so; the Australian "horde" is seldom larger than sixty souls. In such cases association and cooperation are for special purposes, like hunting; they do not rise to any permanent political order.

The earliest form of continuous social organization was the clan—a group of related families occupying a common tract of land, having the same totem, and governed by the same customs or laws. When a group of clans united under the same chief the tribe was formed, and became the second step on the way to the state. But this was a slow development; many groups had no chiefs at all," and many more seem to have tolerated them only in time of war. Instead of democracy being a wilted feather in the cap of our own age, it appears at its best in several primitive groups where such government as exists is merely the rule of the family-heads of the clan, and no arbitrary authority is allowed.' The Iroquois and Delaware Indians recognized no laws or restraints beyond the natural order of the family and the clan; their chiefs had modest powers, which might at any time be ended by the elders of the

tribe. The Omaha Indians were ruled by a Council of Seven, who deliberated until they came to a unanimous agreement; add this to the famous League of the Iroquois, by which many tribes bound themselves-and honored their pledge-to keep the peace, and one sees no great gap between these "savages" and the modern states that bind themselves revocably to peace in the League of Nations.

It is war that makes the chief, the king and the state, just as it is these that make war. In Samoa the chief had power during war, but at other times no one paid much attention to him. The Dyaks had no other government than that of each family by its head; in case of strife they chose their bravest warrior to lead them, and obeyed him strictly; but once the conflict was ended they literally sent him about his business. In the intervals of peace it was the priest, or head magician, who had most authority and influence; and when at last a permanent kingship developed as the usual mode of government among a majority of tribes, it combined- and derived from-the offices of warrior, father and priest. Societies are ruled by two powers: in peace by the word, in crises by the sword; force is used only when indoctrination fails. Law and myth have gone hand in hand throughout the centuries, cooperating or taking turns in the management of mankind; until our own day no state dared separate them, and perhaps tomorrow they will be united again.

How did war lead to the state? It is not that men were naturally inclined to war. Some lowly peoples are quite peaceful; and the Eskimos could not understand why Europeans of the same pacific faith should hunt one another like seals and steal one another's land. "How well it is"- they apostrophized their soil-"that you are covered with ice and snow! How well it is that if in your rocks there are gold and silver, for which the Christians are so greedy, it is covered with so much snow that they cannot get at it! Your unfruitfulness makes us happy, and saves us from molestation." Nevertheless, primitive life was incarnadined with intermittent war. Hunters fought for 'happy hunting grounds still rich in prey, herders fought for new pastures for their flocks, tillers fought for virgin soil; all of them, at times, fought to avenge a murder, or to harden and discipline their youth, or to interrupt the monotony of life, or for simple plunder and rape; very rarely for religion. There were institutions and customs for the limitation of slaughter, as among ourselves-certain hours, days, weeks or months during which no gentleman savage would kill; certain functionaries who were inviolable, certain roads neutralized, certain markets and asylums set aside for peace; and the League of the Iroquois maintained the "Great Peace" for three hundred years.' But for the most part war was the favorite instrument of natural selection among primitive nations and groups.

Its results were endless. It acted as a ruthless eliminator of weak peoples, and raised the level of the race in courage, violence, cruelty, intelligence and skill. It stimulated invention, made weapons that became useful tools, and arts of war that became arts of peace. (How many railroads today begin in strategy and end in trade!). Above all, war dissolved primitive communism and anarchism, introduced organization and discipline, and led to the enslavement of prisoners, the subordination of classes, and the growth of government. Property was the mother, war was the father, of the state.

II. THE STATE

As the organization of force-The village community- The psychological aides of the state

"A herd of blonde beasts of prey," says Nietzsche, "a race of conquerors and masters, which with all its warlike organization and all its organizing power pounces with its terrible claws upon a population, in numbers possibly tremendously superior, but as yet formless, such is the origin of the state." "The state as distinct from tribal organization," says Lester Ward, "begins with the conquest of one race by another." "Everywhere," says Oppenheimer, "we find some warlike tribe breaking through the boundaries of some less warlike people, settling down as nobility, and founding its state." "Violence," says Ratzenhofer, "is the agent which has created the state." The state, says Gumpłowicz, is the result of conquest, the establishment of the victors as a ruling caste over the vanquished. "The state," says Sumner, "is the product of force, and exists by force."

This violent subjection is usually of a settled agricultural group by a tribe of hunters and herders. For agriculture teaches men pacific ways, inures them to a prosaic routine, and exhausts them with the long day's toil; such men accumulate wealth, but they forget the arts and sentiments of war. The hunter and the herder, accustomed to danger and skilled in killing, look upon war as but another form of the chase, and hardly more perilous; when the woods cease to give them abundant game, or flocks decrease through a thinning pasture, they look with envy upon the ripe fields of the village, they invent with modern ease some plausible reason for attack, they invade, conquer, enslave and rule.

The state is a late development, and hardly appears before the time of written history. For it presupposes a change in the very principle of social organization—from kinship to domination; and in primitive societies the former is the rule. Domination succeeds best where it binds diverse natural groups into an advantageous unity of order and trade. Even such conquest is seldom lasting except where the progress of invention has strengthened the strong by putting into their hands new tools and weapons for suppressing revolt. In permanent conquest the principle of domination tends to become concealed and almost unconscious; the French who rebelled in 1789 hardly realized, until Camille Desmoulins reminded them, that the aristocracy that had ruled them for a thousand years had come from Germany and had subjugated them by force. Time sanctifies everything; even the most arrant theft, in the hands of the robber's grandchildren, becomes sacred and inviolable property. Every state begins in compulsion; but the habits of obedience become the content of conscience, and soon every citizen thrills with loyalty to the flag.

The citizen is right; for however the state begins, it soon becomes an indispensable prop to order. As trade unites clans and tribes, relations spring up that depend not on kinship but on contiguity, and therefore require an artificial principle of regulation. The village community may serve as an example: it displaced tribe and clan as the mode of local organization, and achieved a simple, almost democratic government of small areas through a concourse of family-heads; but the very existence and number of such communities created a need for some external force that could regulate their

interrelations and weave them into a larger economic web. The state, though it was in its origin, supplied this need; it became not merely an organized force, but an instrument for adjusting the interests of the thousand conflicting groups that constitute a complex society. It spread the tentacles of its power and law over wider and wider areas, and though it made external war more destructive than before, it extended and maintained internal peace; state may be defined as internal peace for external war. Men decided that it was better to pay taxes than to fight among themselves; better to pay tribute to one magnificent robber than to bribe them all. What an inter-*regnum* meant to a society accustomed to government may be judged from the behavior of the Baganda, among whom, when the king died, every man had to arm himself; for the lawless ran riot, killing and plundering every-where. "Without autocratic rule," as Spencer said, "the evolution of society could not have commenced.

A state which should rely upon force alone would soon fall, for though men are naturally gullible they are also naturally obstinate, and power, like taxes, succeeds best when it is invisible and indirect. Hence the state, in order to maintain itself, used and forged many instruments of indoctrination—the family, the church, the school—to build in the soul of the citizen a habit of patriotic loyalty and pride. This saved a thousand policemen, and prepared the public mind for that docile coherence which is indispensable in war. Above all, the ruling minority sought more and more to transform its forcible mastery into a body of law which, while consolidating that mastery, would afford a welcome security and order to the people, and would recognize the rights of the "subject"⁵ sufficiently to win his acceptance of the law and his adherence to the State.

III. LAW

Lawlessness-Law and custom-Revenge-Fines-Courts-Ordeal -The duel-Punishment-Primitive freedom

Law comes with property, marriage and government; the lowest societies manage to get along without it. "I have lived with communities of savages in South America and in the East," said Alfred Russell Wallace, "who have no law or law-courts but the public opinion of the village freely expressed. Each man scrupulously respects the rights of his fellows, and any infraction of those rights rarely or never takes place. In such a community all are nearly equal. Herman Melville writes similarly of the Marquesas Islanders: "During the time I have lived among the Typees no one was ever put upon his trial for any violence to the public. Every-thing went on in the valley with a harmony and smoothness unparalleled, I will venture to assert, in the most select, refined, and pious associations of mortals in Christendom.". The old Russian Government established courts of law in the Aleutian Islands, but in fifty years those courts found no employment. "Crime and offenses," reports Brinton, "were so infrequent under the social system of the Iroquois that they can scarcely be said to have had a penal code.'. Such are the ideal—perhaps the idealized—conditions for whose return the anarchist perennially pines.

Certain amendments must be made to these descriptions. Natural societies are comparatively free from law first because they are ruled by customs as

⁵ Note how this word betrays the origin of the state

rigid and inviolable as any law; and secondly because crimes of violence, in the beginning, are considered to be private matters, and are left to bloody personal revenge.

Underneath all the phenomena of society is the great *terra firma* of custom, that bedrock of time-hallowed modes of thought and action which provides a society with some measure of steadiness and order through all absence, changes, and interruptions of law. Custom gives the same stability to the group that heredity and instinct give to the species, and habit to the individual. It is the routine that keeps men sane; for if there were no grooves along which thought and action might move with unconscious ease, the mind would be perpetually hesitant, and would soon take refuge in lunacy. A law of economy works in instinct and habit, in custom and convention:

the most convenient mode of response to repeated stimuli or traditional situations is automatic response. Thought and innovation are disturbances of regularity, and are tolerated only for indispensable readaptations, or promised gold.

When to this natural basis of custom a supernatural sanction is added by religion, and the ways of one's ancestors are also the will of the gods, then custom becomes stronger than law, and subtracts substantially from primitive freedom. To violate law is to win the admiration of half the populace, who secretly envy anyone who can outwit this ancient enemy; to violate custom is to incur almost universal hostility. For custom rises out of the people, whereas law is forced upon them from above; law is usually a decree of the master, but custom is the natural selection of those modes of action that have been found most convenient in the experience of the group. Law partly replaces custom when the state replaces the natural order of the family, the clan, the tribe, and the village community; it more fully replaces custom when writing appears, and laws graduate from a code carried down in the memory of elders and priests into a system of legislation proclaimed in written tables. But the replacement is never complete; in the determination and judgment of human conduct custom remains to the end—the force behind the law, the power behind the throne, the last "magistrate of men's lives."

The first stage in the evolution of law is personal revenge. "Vengeance is mine," says the primitive individual; "I will repay." Among the Indian tribes of Lower California every man was his own policeman, and administered justice in the form of such vengeance as he was strong enough to take. So in many early societies the murder of A by B led to the murder of B by A's son or friend C, the murder of C by B's son or friend D, and so on perhaps to the end of the alphabet; we may find examples among the purest-blooded American families of today. This principle of revenge persists throughout the history of law: it appears in the *Lex Talionis*-or Law of Retaliation-embodied in Roman Law; it plays a large role in the Code of Hammurabi, and in the "Mosaic" demand of "an eye for an eye and a tooth for a tooth"; and it lurks behind most legal punishments even in our day.

The second step toward law and civilization in the treatment of crime was the substitution of damages for revenge. Very often the chief, to maintain internal harmony, used his power or influence to have the revengeful family content itself with gold or goods instead of blood. Soon a regular tariff arose, determining how much must be paid for an eye, a tooth, an arm, or a life; Hammurabi legislated extensively in such terms. The Abyssinians were so

meticulous in this regard that when a boy fell from a tree upon his companion and killed him, the judges decided that the bereaved mother should send another of her sons into the tree to fall upon the culprit's neck⁶. The penalties assessed in cases of composition insight vary with the sex, age and rank of the offender and the injured; among the Fijians, for example, petty larceny by a common man was considered a more heinous crime than murder by a chief⁷. Throughout the history of law the magnitude of the crime has been lessened by the magnitude of the criminal. Since these fines or compositions, paid to avert revenge, required some adjudication of offenses and damages, a third step towards law was taken by the formation of courts; the chief or the elders or the priests sat in judgment to settle the conflicts of their people. Such courts were not always judgment seats; often they were boards of voluntary conciliation, which arranged some amicable settlement of the dispute. For many centuries, and among many peoples, resort to courts remained optional; and where the offended party was dissatisfied with the judgment rendered, he was still free to seek personal revenge...

In many cases disputes were settled by a public contest between the parties, varying in bloodiness from a harmless boxing-match -as among the wise Eskimos- to a duel to the death. Frequently the primitive mind re- sorted to an ordeal not so much on the medieval theory that a deity would reveal the culprit as in the hope that the ordeal, however unjust, would end a feud that might otherwise embroil the tribe for generations. Some- times accuser and accused were asked to choose between two howls of food of which one was poisoned; the wrong party might be poisoned (usually not beyond redemption), but then the dispute was ended, since" both parties ordinarily believed in the righteousness of the ordeal. Among some tribes it was the custom for a native who acknowledged his guilt to hold out his leg and permit the injured party to pierce it with a spear. Or the accused submitted to having spears thrown at him by his accusers; if they all missed him he was declared innocent; if he was hit, even by one, he was adjudged guilty, and the affair was closed." From such early forms the ordeal persisted through the laws of Moses and Hammurabi and down into the Middle Ages; the duel, which is one form of the ordeal, and which historians thought dead, is being revived in our own day. So brief and narrow, in some respects, is the span between primitive and modern man; so short is the history of civilization.

The fourth advance in the growth of law was the assumption, by the chief or the state, of the obligation to prevent and punish wrongs. It is but a step from settling disputes and punishing offenses to making some effort to prevent them. So the chief becomes not merely a judge but a lawgiver; and to the general body of "common law" derived from the customs of the group is added a body of "positive law," derived from the decrees of the government; in the one case the laws grow up, in the other they are handed down. In either case the laws carry with them the mark of their ancestry, and reek with the vengeance which they tried to replace. Primitive punishments are cruel," because primitive society feels insecure; as social organization becomes more stable, punishments become less severe.

⁶ A phrase apparently invented by Cicero

⁷ Perhaps an exception should be made in the case of the Brahmans, who, by the Code of Manu (VIII, 336-8), were called upon to bear greater punishments for the same crime than members of lower castes; but this regulation was well honored in the breach.

In general the individual has fewer "rights" in natural society than under civilization. Everywhere man is born in chains: the chains of heredity, of environment, of custom, and of law. The primitive individual moves always within a web of regulations incredibly stringent and detailed; a thousand taboos restrict his action, a thousand terrors limit his will. The natives of New Zealand were apparently without laws, but in actual fact rigid custom ruled every aspect of their lives. Unchangeable and unquestionable conventions determined the sitting and the rising, the standing and the walking, the eating, drinking and sleeping of the natives of Bengal. The individual was hardly recognized as a separate entity in natural society; what existed was the family and the clan, the tribe and the village community; it was these that owned land and exercised power. Only with the coming of private property, which gave him economic authority, and of the state, which gave him a legal status and defined rights, did the individual begin to stand out as a distinct reality. Right do not come to us from nature, which knows no rights except cunning and strength; they are privileges assured to individuals by the community as advantageous to the common good. Liberty is a luxury of security; the free individual is a product and a mark of civilization.

IV. THE FAMILY

**Its function in civilization-The clan vs. the family-Growth of parental care-
Unimportance of the father-Separation of the sexes-Mother-right-Status
of woman-Her occupations-Her economic achievements
-The patriarchate-The subjection of woman**

As the basic needs of man are hunger and love, so the fundamental functions of social organization are economic provision and biological maintenance; a stream of children is as vital as a continuity of food. To institutions which seek material welfare and political order, society always adds institutions for the perpetuation of the race. Until the state-towards the dawn of the historic civilizations-becomes the central and permanent source of social order, the clan undertakes the delicate task of regulating the relations between the sexes and between the generations; and even after the state has been established, the essential government of mankind remains in that most deep-rooted of all historic institutions, the family.

It is highly improbable that the first human beings lived in isolated families, even in the hunting stage; for the inferiority of man in physiological organs of defense would have left such families a prey to marauding beasts. Usually, in nature, those organisms that are poorly equipped for individual defense live in groups, and find in united action a means of survival in a world bristling with tusks and claws and impenetrable hides. Presumably it was so with man; he saved himself by solidarity in the hunting-pack and the clan. When economic relations and political mastery replaced kinship as the principle of social organization, the clan lost its position as the sub-structure of society; at the bottom it was supplanted by the family, at the top it was superseded by the state. Government took over the problem of maintaining order, while the family assumed the tasks of reorganizing industry and carrying on the race.

Among the lower animals there is no care of progeny; consequently eggs are spawned in great number, and some survive and develop while the great majority are eaten or destroyed. Most fish lay a million eggs per year;

a few species of fish show a modest solicitude for their offspring, and find half a hundred eggs per year sufficient for their purposes. Birds care better for their young, and hatch from five to twelve eggs yearly; mammals, whose very name suggest parental care, master the earth with an average of three young per female per year. Throughout the animal world fertility and destruction decrease as parental care increases; throughout the human world the birth rate and the death rate fall together as civilization rises. Better family care makes possible a longer adolescence, in which the young receive fuller training and development before they are flung upon their own resources; and the lowered birth rate release human energy for other activities than reproduction.

Since it was the mother who fulfilled most of the parental functions, the family was at first (so far as we can pierce the mists of history) organized on the assumption that the position of the man in the family was superficial and incidental, while that of the woman was fundamental and supreme. In some existing tribes, and probably in the earliest human groups the physiological role of the male in reproduction appears to have escaped notice quite as completely as among animals, who rut and mate and breed with happy unconsciousness of cause and effect. The Trobriand Islanders attribute pregnancy not to any commerce of the sexes, but to the entrance of a *baloma*, or ghost, into the woman. Usually the ghost enters while the woman is bathing; "a fish has bitten me," the girl reports. "When," says Malinowski, "I asked who was the father of an illegitimate child, there was only one answer—that there was no father, since the girl was unmarried. If, then, I asked, in quite plain terms, who was the physiological father, the question was not understood. . . . The answer would be: 'It is a *baloma* who gave her this child.' These islanders had a strange belief that the *baloma* would more readily enter a girl given to loose relations with men; nevertheless, in choosing precautions against pregnancy, the girls preferred to avoid bathing at high tide rather than to forego relations with men.' It is a delightful story, which must have proved a great convenience in the embarrassing aftermath of generosity; it would be still more delightful if it had been invented for anthropologists as well as for husbands.

In Melanesia intercourse was recognized as the cause of pregnancy, but unmarried girls insisted on blaming some article in their diet. Even where the function of the male was understood, sex relationships were so irregular that it was never a simple matter to determine the father. Consequently the quite primitive mother seldom bothered to inquire into the paternity of her child; it belonged to her, and she belonged not to a husband but to her father-or her brother-and the clan; it was with these that she remained, and these were the only male relatives whom her child would know. The bonds of affection between brother and sister were usually stronger than between husband and wife. The husband, in many cases, remained in the family and clan of his mother, and saw his wife only as a clandestine visitor. Even in classical civilization the brother was dearer than the husband: it was her brother, not her husband, that the wife of Intaphernes saved from the wrath of Darius; it was for her brother, not for her husband, that Antigone sacrificed herself.' "The notion that a man's wife is the nearest person in the world to him is a relatively modern notion, and one which is restricted to a comparatively small part of the human race."

So slight is the relation between father and children in primitive society that in a great number of tribes the sexes live apart. In Australia and British New Guinea, in Africa and Micronesia, in Assam and Burma, among the Aleuts,

Eskimos and Samoyeds, and here and there over the earth, tribes may still be found in which there is no visible family life; the men live apart from the women, and visit them only now and then; even the meals are taken separately. In northern Papua it is not considered right for a man to be seen associating socially with a woman, even if she is the mother of his children. In Tahiti "family life is quite unknown." Out of this segregation of the sexes come those secret fraternities-usually of males-which appear everywhere among primitive races, and serve most often as a refuge against women... They resemble our modern fraternities in another point-their hierarchical organization.

The simplest form of the family, then, was the woman and her children, living with her mother or her brother in the clan; such an arrangement was a natural outgrowth of the animal family of the mother and her litter, and of the biological ignorance of primitive man. An alternative early form was "matrilocal marriage": the husband left his clan and went to live with the clan and family of his wife, laboring for her or with her in the service of her parents. Descent, in such cases, was traced through the female line, and inheritance was through the mother; sometimes even the kingship passed down through her rather than through the male... This "mother-right" was not a "matriarchate"-it did not imply the rule of women over men." Even when property was transmitted through the woman she had little power over it; she was used as a means of tracing relationships which, through primitive laxity or freedom, were otherwise obscure. It is true that in any system of society the woman exercises a certain authority, rising naturally out of her importance in the home, out of her function as the dispenser of food, and out of the need that the male has of her, and her power to refuse him. It is also true that there have been, occasionally, women rulers among some South American tribes; that in the Pelew Islands the chief did nothing of consequence without the advice of a council of elder women; that among the Iroquois the squaws had an equal right, with the men, of speaking and voting in the tribal council; and that among the Seneca Indians women held great power, even to the selection of the chief. But these are rare and exceptional cases. All in all the position of woman in early societies was one of subjection verging upon slavery. Her periodic disability, her unfamiliarity with weapons, the biological absorption of her strength in carrying, nursing and rearing children, handicapped her in the war of the sexes, and doomed her to a subordinate status in all but the very lowest and the very highest societies. Nor was her position necessarily to rise with the development of civilization; it was destined to be lower in Periclean Greece than among the North American Indians; it was to rise and fall with her strategic importance rather than with the culture and morals of men.

In the hunting stage she did almost all the work except the active capture of the game. In return for exposing himself to the hardships and risks of the chase, the male rested magnificently for the greater part of the year. The woman bore her children abundantly, reared them, kept the hut or home in repair, gathered food in woods and fields, cooked, cleaned, and made the clothing and the boots... Because the men, when the tribe moved, had to be ready at any moment to fight off attack, they carried nothing but their weapons; the women carried all the rest. Bush-women were used as servants and beasts of burden; if they proved too weak to keep up with the march, they were abandoned. When the natives of the Lower Murray saw pack oxen they thought that these were the wives of the whites. The differences in strength which now

divide the sexes hardly existed in those days, and are now environmental rather than innate: woman, apart from her biological disabilities, was almost the equal of man in stature, endurance, resourcefulness and courage; she was not yet an ornament, a thing of beauty, or a sexual toy; she was a robust animal, able to perform arduous work for long hours, and, if necessary, to fight to the death for her children or her clan. "Women," said a chieftain of the Chippewas, "are created for work. One of them can draw or carry as much as two men. They also pitch our tents, make our clothes, mend them, and keep us warm at night. . . . We absolutely cannot get along without them on a journey. They do everything and cost only a little; for since they must be forever cooking, they can be satisfied in lean times by licking their fingers."

Most economic advances, in early society, were made by the woman rather than the man. While for centuries he clung to his ancient ways of hunting and herding, she developed agriculture near the camp, and those busy arts of the home which were to become the most important industries of later days. From the "wool-bearing tree," as the Greeks called the cotton plant, the primitive woman rolled thread and made cotton cloth." It was she, apparently, who developed sewing, weaving, basketry, pottery, woodworking, and building; and in many cases it was she who carried on primitive trade... It was she who developed the home, slowly adding man to the list of her domesticated animals, and training him in those social dispositions and amenities which are the psychological basis and cement of civilization.

But as agriculture became more complex and brought larger rewards, the stronger sex took more and more of it into its own hands... The growth of cattle-breeding gave the man a new source of wealth, stability and power; even agriculture, which must have seemed so prosaic to the mighty Nimrods of antiquity, was at last accepted by the wandering male, and the economic leadership which tillage had for a time given to women was wrested from them by the men. The application to agriculture of those very animals that woman had first domesticated led to her replacement by the male in the control of the fields; the advance from the hoe to the plough put a premium upon physical strength, and enabled the man to assert his supremacy. The growth of transmissible property in cattle and in the products of the soil led to the sexual subordination of woman, for the male now demanded from her that fidelity which he thought would enable him to pass on his accumulations to children presumably his own. Gradually the man had his way: fatherhood became recognized, and property began to descend through the male; mother-right yielded to father-right; and the patriarchal family, with the oldest male at its head, became the economic, legal, political and moral unit of society. The gods, who had been mostly feminine, became great bearded patriarchs, with such harems as ambitious men dreamed of in their solitude.

This passage to the patriarchal-father-ruled-family was fatal to the position of woman. In all essential aspects she and her children became the property first of her father or oldest brother, then of her husband. She was bought in marriage precisely as a slave was bought in the market. She was bequeathed as property when her husband died; and in some places (New Guinea, the New Hebrides, the Solomon Islands, Fiji, India, etc.) she was strangled and buried with her dead husband, or was expected to commit suicide, in order to attend upon him in the other world." The father had now the right to treat, give, sell or lend his wives and daughters very much as he pleased, subject

only to the social condemnation of other fathers exercising the same rights. While the male reserved the privilege of extending his sexual favors beyond his home, the woman-under patriarchal institutions-was vowed to complete chastity before marriage, and complete fidelity after it. The double standard was born.

The general subjection of woman which had existed in the hunting stage, and had persisted, in diminished form, through the period of mother-right, became now more pronounced and merciless than before. In ancient Russia, on the marriage of a daughter, the father struck her gently with a whip, and then presented the whip to the bridegroom," as a sign that her beatings were now to come from a rejuvenated hand. Even the American Indians, among whom mother-right survived indefinitely, treated their women harshly, consigned to them all drudgery, and often called them dogs." Everywhere the life of a woman was considered cheaper than that of a man; and when girls were born there was none of the rejoicing that marked the coming of a male. Mothers sometimes destroyed their female children to keep them from misery. In Fiji wives might be sold at pleasure, and the usual price was a musket." Among some tribes man and wife did not sleep together, lest the breath of the woman should enfeeble the man; in Fiji it was not thought proper for a man to sleep regularly at home; in New Caledonia the wife slept in a shed, while the man slept in the house. In Fiji dogs were allowed in some of the temples, but women were excluded from all;" such exclusion of women from religious services survives in Islam to this day. Doubtless woman enjoyed at all times the mastery that comes of long-continued speech; the men might be rebuffed, harangued, even-now and then-beaten." But all in all the man was lord, the woman was servant. The Kaffir bought women like slaves, as a form of life-income insurance; when he had a sufficient number of wives he could rest for the remainder of his days; they would do all the work for him. Some tribes of ancient India reckoned the women of a family as part of the property inheritance, along with the domestic animals;. nor did the last commandment of Moses distinguish very clearly in this matter. Throughout negro Africa women hardly differed from slaves, except that they were expected to provide sexual as well as economic satisfaction. Marriage began as a form of the law of property, as a part of the institution of slavery.

CHAPTER IV

The Moral Elements of Civilization

SINCE no society can exist without order, and no order without regulation, we may take it as a rule of history that the power of custom varies inversely as the multiplicity of laws, much as the power of instinct varies inversely as the multiplicity of thoughts. Some rules are necessary for the game of life; they may differ in different groups, but within the group they must be essentially the same. These rules may be conventions, customs, morals, or laws. Conventions are forms of behavior found expedient by a people; customs are conventions accepted by successive generations, after natural selection through trial and error and elimination; morals are such customs as the group considers vital to its welfare and development. In primitive societies, where there is no written law, these vital customs or morals regulate every sphere of human existence, and give stability and continuity to the social order. Through the slow magic of time such customs, by long repetition, become a second nature in the individual; if he violates them he feels a certain fear, discomfort or shame; this is the origin of that conscience, or moral sense, which Darwin chose as the most impressive distinction between animals and men.' In its higher development conscience is social consciousness-the feeling of the individual that he belongs to a group, and owes it some measure of loyalty and consideration. Morality is the cooperation of the part with the whole, and of each group with some larger whole. Civilization, of course, would be impossible without it.

I. MARRIAGE

**The meaning of marriage-Its biological origins-Sexual communism-Trial marriage-Group marriage-Individual marriage-Polygamy
-Its eugenic value-Exogamy-Marriage by service-
By capture-By purchase-Primitive love-
The economic function of marriage**

The first task of those customs that constitute the moral code of a group is to regulate the relations of the sexes, for these are a perennial source of discord, violence, and possible degeneration. The basic form of this sexual regulation is marriage! which may be defined as the association of mates for the care of offspring. It is a variable and fluctuating institution, which has passed through almost every conceivable form and experiment in the course of its history, from the primitive care of offspring without the association of mates to the modern association of mates without the care of offspring.

Our animal forefathers invented it. Some birds seem to live as reproducing mates in a divorceless monogamy. Among gorillas and orangutans the association of the parents continues to the end of the breeding season, and has many human features. Any approach to loose behavior on the part of the female is severely punished by the male. The orangs of Borneo, says De

Crespigny, "live in families: the male, the female, and a young one"; and Dr. Savage reports of the gorillas that "it is not unusual to see the 'old folks' sitting under a tree regaling themselves with fruit and friendly chat, while their children are leaping around them and swinging from branch to branch in boisterous merriment." Marriage is older than man.

Societies without marriage are rare, but the sedulous inquirer can find enough of them to form a respectable transition from the promiscuity of the lower mammals to the marriages of primitive men. In Futuna and Hawaii the majority of the people did not marry at all; the Lubus mated freely and indiscriminately, and had no conception of marriage; certain tribes of Borneo lived in marriageless association, freer than the birds; and among some peoples of primitive Russia "the men utilized the women without distinction, so that no woman had her appointed husband." African pygmies have been described as having no marriage institutions, but as following "their animal instincts wholly without restraint." This primitive "nationalization of women," corresponding to primitive communism in land and food, passed away at so early a stage that few traces of it remain. Some memory of it, however, lingered on in divers forms: in the feeling of many nature peoples that monogamy-which they would define as the monopoly of a woman by one man-is unnatural and immoral;" in periodic festivals of license (still surviving faintly in our *Mardi Gras*), when sexual restraints were temporarily abandoned; in the demand that a woman should give herself-as at the Temple of Mylitta in Babylon-to any man that solicited her, before she would be allowed to marry; in the custom of wife-lending, so essential to many primitive codes of hospitality; and in the *jus primee noctis*, or right of the first night, by which, in early feudal Europe, the lord of the manor, perhaps representing the ancient rights of the tribe, occasionally deflowered the bride before the bridegroom was allowed to consummate the marriage...

A variety of tentative unions gradually took the place of indiscriminate relations. Among the Orang Sakai of Malacca a girl remained for a time with each man of the tribe, passing from one to another until she had made the rounds; then she began again.' Among the Yakuts of Siberia, the Botocudos of South Africa, the lower classes of Tibet, and many other peoples, marriage was quite experimental, and could be ended at the will of either party, with no reasons given or required. Among the Bushmen "any disagreement sufficed to end a union, and new connections could immediately be found for both." Among the Damaras, according to Sir Francis Galton, "the spouse was changed almost weekly, and I seldom knew without inquiry who the *pro tempore* husband of each lady was at any particular time." Among the Baila "women are banded about from man to man, and of their own accord leave one husband for another. Young women scarcely out of their teens often have had four or five husbands, all still living." The original word for marriage, in Hawaii, meant to try.' Among the Tahitians, a century ago, unions were free and dissoluble at will, so long as there were no children; if a child came the parents might destroy it without social reproach, or the couple might rear the child and enter into a more permanent relation; the man pledged his support to the woman in return for the burden of parental care that she now assumed.,.

Marco Polo writes of a Central Asiatic tribe, inhabiting Peyn (now Keriya) in the thirteenth century: "If a married man goes to a distance from home to be absent twenty days, his wife has a right, if she is so inclined, to take another husband; and the men, on the same principle, marry wherever they

happen to reside. So old are the latest innovations in marriage and morals.

Letourneau said of marriage that "every possible experiment compatible with the duration of savage or barbarian societies has been tried, or is still practiced, amongst various races, without the least thought of the moral ideas generally prevailing in Europe." In addition to experiments in permanence there were experiments in relationship. In a few cases we find "group marriage," by which a number of men belonging to one group married collectively a number of women belonging to another group." In Tibet, for example, it was the custom for a group of brothers to marry a group of sisters, and for the two groups to practice sexual communism between them, each of the men cohabiting with each of the women." Caesar reported a similar custom in ancient Britain." Survivals of it appear in the "levirate," a custom existing among the early Jews and other ancient peoples, by which a man was obligated to marry his brother's widow; this was the rule that so irked Onan.

What was it that led men to replace the semi-promiscuity of primitive society with individual marriage? Since, in a great majority of nature peoples, there are few, if any, restraints on premarital relations, it is obvious that physical desire does not give rise to the institution of marriage. For marriage, with its restrictions and psychological irritations, could not possibly compete with sexual communism as a mode of satisfying the erotic propensities of men. Nor could the individual establishment offer at the outset any mode of rearing children that would be obviously superior to their rearing by the mother, her family, and the clan. Some powerful economic motives must have favored the evolution of marriage. In all probability (for again we must remind ourselves how little we really know of origins) these motives were connected with the rising institution of property.

Individual marriage came through the desire of the male to have cheap slaves, and to avoid bequeathing his property to other men's children. Polygamy, or the marriage of one person to several mates, appears here and there in the form of polyandry-the marriage of one woman to several men-as among the Todas and some tribes of Tibet;" the custom may still be found where males outnumber females considerably." But this custom soon falls prey to the conquering male, and polygamy has come to mean for us, usually, what would more strictly be called polygamy-the possession of several wives by one man. Medieval theologians thought that Mohammed had invented polygamy, but it antedated Islam by some years, being the prevailing mode of marriage in the primitive world." Many causes conspired to make it general. In early society, because of hunting and war, the life of the male is more violent and dangerous, and the death rate of men is higher, than that of women. The consequent excess of women compels a choice between polygamy and the barren celibacy of a minority of women; but such celibacy is intolerable to peoples who require a high birth rate to make up for a high death rate, and who therefore scorn the mateless and childless woman. Again, men like variety; as the Negroes of Angola expressed it, they were "not able to eat always of the same dish." Also, men like youth in their mates, and women age rapidly in primitive communities. The women themselves often favored polygamy; it permitted them to nurse their children longer, and therefore to reduce the frequency of motherhood without interfering with the erotic and philoprogenitive inclinations of the male. Sometimes the first wife, burdened with toil, helped her husband to secure an additional wife, so that her burden

might be shared, and additional children might raise the productive power and the wealth of the family.” Children were economic assets, and men invested in wives in order to draw children from them like interest. In the patriarchal system wives and children were in effect the slaves of the man; the more a man had of them, the richer he was. The poor man practiced monogamy, but he looked upon it as a shameful condition, from which some day he would rise to the respected position of a polygamous male.

Doubtless polygamy was well adapted to the marital needs of a primitive society in which women outnumbered men. It had a eugenic value superior to that of contemporary monogamy; for whereas in modern society the most able and prudent men marry latest and have least children, under polygamy the most able men, presumably, secured the best mates and had most children. Hence polygamy has survived among practically all nature peoples, even among the majority of civilized mankind; only in our day has it begun to die in the Orient. Certain conditions, however, militated against it. The decrease in danger and violence, consequent upon a settled agricultural life, brought the sexes towards an approximate numerical equality; and under these circumstances open polygamy, even in primitive societies, became the privilege of the prosperous minority.” The mass of the people practiced a monogamy tempered with adultery, while another minority, of willing or regretful celibates, balanced the polygamy of the rich. Jealousy in the male, and possessiveness in the female, entered into the situation more effectively as the sexes approximated in number; for where the strong could not have a multiplicity of wives except by taking the actual or potential wives of other men and by (in some cases) offending their own, polygamy became a difficult matter, which only the cleverest could manage. As property accumulated, and men were loath to scatter it in small bequests, it became desirable to differentiate wives into "chief wife" and concubines, so that only the children of the former should share the legacy; this remained the status of marriage in Asia until our own generation. Gradually the chief wife became the only wife, the concubines became kept women in secret and apart, or they disappeared; and as Christianity entered upon the scene, monogamy, in Europe, took the place of polygamy as the lawful and outward form of sexual association. But monogamy, like letters and the state, is artificial, and belongs to the history, not to the origins, of civilization.

Whatever form the union might take, marriage was obligatory among nearly all primitive peoples. The unmarried male had no standing in the community, or was considered only half a man... Exogamy, too, was compulsory: that is to say, a man was expected to secure his wife from another clan than his own. Whether this custom arose because the primitive mind suspected the evil effects of close inbreeding, or because such intergroup marriages created or cemented useful political alliances, promoted social organization, and lessened the danger of war, or because the capture of a wife from another tribe had become a fashionable mark of male maturity, or because familiarity breeds contempt and distance lends enchantment to the view—we do not know. In any case the restriction was well-nigh universal in early society; and though it was successfully violated by the Pharaohs, the Ptolemies and the Incas, who all favored the marriage of brother and sister, it survived into Roman and modern law and consciously or unconsciously moulds our behavior to this day.

How did the male secure his wife from another tribe? Where the matriarchal organization was strong he was often required to go and live with the clan of the girl whom he sought. As the patriarchal system developed, the suitor was allowed, after a term of service to the father, to take his bride back to his own clan; so Jacob served Laban for Leah and Rachel." Sometimes the suitor shortened the matter with plain, blunt force. It was an advantage as well as a distinction to have stolen a wife; not only would she be a cheap slave, but new slaves could be begotten of her, and these children would chain her to her slavery. Such marriage by capture, though not the rule, occurred sporadically in the primitive world. Among the North American Indians the women were included in the spoils of war, and this happened so frequently that in some tribes the husbands and their wives spoke mutually unintelligible languages. The Slavs of Russia and Serbia practiced occasional marriage by capture until the last century⁸. Vestiges of it remain in the custom of simulating the capture of the bride by the groom in certain wedding ceremonies.' All in all it was a logical aspect of the almost incessant war of the tribes, and a logical starting-point for that eternal war of the sexes whose only truces are brief nocturnes and dreamless sleep.

As wealth grew it became more convenient to offer the father a substantial present-or a sum of money-for his daughter, rather than serve for her in an alien clan, or risk the violence and feuds that might come of marriage by capture. Consequently marriage by purchase and parental arrangement was the rule in early societies... Transition forms occur; the Melanesians sometimes stole their wives, but made the theft legal by a later payment to her family. Among some natives of New Guinea the man abducted the girl, and then, while he and she were in hiding, commissioned his friends to bargain with her father over a purchase price... The ease with which moral indignation in these matters might be financially appeased is illuminating. A Maori mother, wailing loudly, bitterly cursed the youth who had eloped with her daughter, until he presented her with a blanket. "That was all I wanted," she said; "I only wanted to get a blanket, and therefore made this noise." Usually the bride cost more than a blanket: among the Hottentots her price was an ox or a cow; among the Croo three cows and a sheep; among the Kaffirs six to thirty head of cattle, depending upon the rank of the girl's family; and among the Togos sixteen dollars cash and six dollars in goods.

Marriage by purchase prevails throughout primitive Africa, and is still a normal institution in China and Japan; it flourished in ancient India and Judea, and in pre-Columbian Central America and Peru; instances of it occur in Europe today. It is a natural development of patriarchal institutions; the father owns the daughter, and may dispose of her, within broad limits, as he sees fit. The Orinoco Indians expressed the matter by saying that the suitor should pay the father for rearing the girl for his use... Sometimes the girl was exhibited to potential suitors in a bride-show; so among the Somalis the bride, richly caparisoned, was led about on horseback or on foot, in an atmosphere heavily perfumed to stir the suitors to a handsome price... There is no record of

⁸ Briffault thinks that marriage by capture was a transition from matrilineal to patriarchal marriage: the male, refusing to go and live with the tribe or family of his wife, forced her to come to his. Lippen believed that exogamy arose as a peaceable substitute for capture;... theft again graduated into trade.

women objecting to marriage by purchase; on the contrary, they took keen pride in the sums paid for them, and scorned the woman who gave herself in marriage without a price;" they believed that in a "love-match" the villainous male was getting too much for nothing. On the other hand, it was usual for the father to acknowledge the bride-groom's payment with a return gift which, as time went on, approximated more and more in value to the sum offered for the bride!' Rich fathers, anxious to smooth the way for their daughters, gradually enlarged these gifts until the institution of the dowry took form; and the purchase of the husband by the father replaced, or accompanied, the purchase of the wife by the suitor.

In all these forms and varieties of marriage there is hardly a trace of romantic love. We find a few cases of love-marriages among the Papuans of New Guinea; among other primitive peoples we come upon instances of love (in the sense of mutual devotion rather than mutual need), but usually these attachments have nothing to do with marriage. In simple days men married for cheap labor, profitable parentage, and regular meals. "In Yariba," says Lander, "marriage is celebrated by the natives as unconcernedly as possible; a man thinks as little of taking a wife as of cutting an ear of corn-affection is altogether out of the question." Since premarital relations are abundant in primitive society, passion is not dammed up by denial, and seldom affects the choice of a wife. For the same reason-the absence of delay between desire and fulfilment-no time is given for that brooding introversion of frustrated, and therefore idealizing, passion which is usually the source of youthful romantic love. Such love is reserved for developed civilizations, in which morals have raised barriers against desire, and the growth of wealth has enabled some men to afford, and some women to provide, the luxuries and delicacies of romance; primitive peoples are too poor to be romantic. One rarely finds love poetry in their songs. When the missionaries translated the Bible into the language of the Algonquins they could discover no native equivalent for the word *love*. The Hottentots are described as "cold and indifferent to one another" in marriage. On the Gold Coast "not even the appearance of affection exists between husband and wife"; and it is the same in primitive Australia. "I asked Baba," said Caillie, speaking of a Senegal Negro, "why he did not sometimes make merry with his wives. He replied that if he did he should not be able to manage them." An Australian native, asked why he wished to marry, answered honestly that he wanted a wife to secure food, water and wood for him, and to carry his belongings on the march." The kiss, which 'seems so indispensable to America, is quite unknown to primitive peoples, -or known only to be scorned."

In general the "savage" takes his sex philosophically, with hardly more of metaphysical or theological misgiving than the animal; he does not brood over it, or fly into a passion with it; it is as much a matter of course with him as his food. He makes no pretense to idealistic motives. Marriage is never a sacrament with him, and seldom an affair of lavish ceremony; it is frankly a commercial transaction. It never occurs to him to be ashamed that he subordinates emotional to practical considerations in choosing his mate; he would rather be ashamed of the opposite, and would demand of us, if he were as immodest as we are, some explanation of our custom of binding a man and a woman together almost for life because sexual desire has chained them for a moment with its lightning. The primitive male looked upon marriage in terms not of sexual license but of economic co-operation. He expected the woman-and the woman expected

herself-to be not so much gracious and beautiful (though he appreciated these qualities in her) as useful and industrious; she was to be an economic asset rather than a total loss; otherwise the matter-of-fact "savage" would never have thought of marriage at all. Marriage was a profitable partnership, not a private debauch; it was a way whereby a man and a woman, working together, might be more prosperous than if each worked alone. Wherever, in the history of civilization, woman has ceased to be an economic asset in marriage, marriage has decayed; and sometimes civilization has decayed with it.

II. SEXUAL MORALITY

Premarital relations- Prostitution- Chastity- Virginit y -The double standard-Modesty-The relativity of morals-The biological role of modest y-Adultery-Divorce-Abortion -infanticide-Childhood-The individual

The greatest task of morals is always sexual regulation; for the reproductive instinct creates problems not only within marriage, but before and after it, and threatens at any moment to disturb social order with its persistence, its intensity, its scorn of law, and its perversions. The first problem concerns premarital relations-shall they be restricted, or free? Even among animals sex is not quite unrestrained; the rejection of the male by the female except in periods of rut reduces sex to a much more modest role in the animal world than it occupies in our own lecherous species. As Beaumarchais put it, man differs from the animal in eating without being hungry, drinking without being thirsty, and making love at all seasons. Among primitive peoples we find some analogue, or converse, of animal restrictions, in the taboo placed upon relations with a woman in her menstrual period. With this general exception premarital intercourse is left for the most part free in the simplest societies. Among the North American Indians the young men and women mated freely; and these relations were not held an impediment to marriage. Among the Papuans of New Guinea sex life began at an extremely early age, and premarital promiscuity was the rule." Similar premarital liberty obtained among the Soyots of Siberia, the Igorots of the Philippines, the natives of Upper Burma, the Kaffirs and Bushmen of Africa, the tribes of the Niger and the Uganda, of New Georgia, the Murray Islands, the Andaman Islands, Tahiti, Polynesia, Assam, etc."

Under such conditions we must not expect to find much prostitution in primitive society. The "oldest profession" is comparatively young; it arises only with civilization, with the appearance of property and the disappearance of premarital freedom. Here and there we find girls selling themselves for a while to raise a dowry, or to provide funds for the temples; but this occurs only where the local moral code approves of it as a pious sacrifice to help thrifty parents or hungry gods.'

Chastity is a correspondingly late development. What the primitive maiden dreaded was not the loss of virginity, but a reputation for sterility;" premarital pregnancy was, more often than not, an aid rather than a handicap in finding a husband, for it settled all doubts of sterility, and promised profitable children. The simpler tribes, before the coming of property, seem to have held virginity in contempt, as indicating unpopularity. The Kamchadal bridegroom who found his bride to be a virgin was much put out, and "roundly abused her mother for the negligent way in which she had brought up her daughter." In many places virginity was considered a barrier to marriage, because it laid upon the husband the

unpleasant task of violating the taboo that forbade him to shed the blood of any member of his tribe. Sometimes girls offered themselves to a stranger in order to break this taboo against their marriage. In Tibet mothers anxiously sought men who would deflower their daughters; in Malabar the girls themselves begged the services of passers-by to the same end, "for while they were virgins they could not find a husband." In some tribes the bride was obliged to give herself to the wedding guests before going in to her husband; in others the bridegroom hired a man to end the virginity of his bride; among certain Philippine tribes a special official was appointed, at a high salary, to perform this function for prospective husbands."

What was it that changed virginity from a fault into a virtue, and made it an element in the moral codes of all the higher civilizations? Doubtless it was the institution of property. Premarital chastity came as an extension, to the daughters, of the proprietary feeling with which the patriarchal male looked upon his wife. The valuation of virginity rose when, under marriage by purchase, the virgin bride was found to bring a higher price than her weak sister; the virgin gave promise, by her past, of that marital fidelity which now seemed so precious to men beset by worry lest they should leave their property to surreptitious children.

The men never thought of applying the same restrictions to themselves; no society in history has ever insisted on the premarital chastity of the male; no language has ever had a word for a virgin man." The aura of virginity was kept exclusively for daughters, and pressed upon them in a thousands ways. The Tuaregs punished the irregularity of a daughter or a sister with death; the Negroes of Nubia, Abyssinia, Somaliland, etc., practiced upon their daughters the cruel art of infibulations -i.e., the attachment of a ring or lock to the genitals to prevent copulation; in Burma and Siam a similar practice survived to our own day." Forms of seclusion arose by which girls were kept from providing or receiving temptation. In New Britain the richer parents confined their daughters, through five dangerous years, in huts guarded by virtuous old crones; the girls were never allowed to come out, and only their relatives could see them. Some tribes in Borneo kept their unmarried girls in solitary confinement... From these primitive customs to the *purdah* of the Moslems and the Hindus is but a step, and indicates again how nearly "civilization" touches "savagery."

Modesty came with virginity and the patriarchy. There are many tribes which to this day show no shame in exposing the body;.. indeed, some are ashamed to wear clothing. All Africa rocked with laughter when Livingstone begged his black hosts to put on some clothing before the arrival of his wife. The Queen of the Balonda was quite naked when she held court for Livingstone... A small minority of tribes practice sex relations publicly, without any thought of shame." At first modesty is the feeling of the woman that she is taboo in her periods. When marriage by purchase takes form, and virginity in the daughter brings a profit to her father, seclusion and the compulsion to virginity beget in the girl a sense of obligation to chastity. Again, modesty is the feeling of the wife who, under purchase marriage, feels a financial obligation to her husband to refrain from such external sexual relations as cannot bring him any recompense. Clothing appears at this point, if motives of adornment and protection have not already engendered it; in many tribes women wore clothing only after marriage," as a sign of their exclusive possession by a husband, and as a deterrent to gallantry; primitive man did not agree with the author of *Penguin Isle* that clothing encouraged lechery. Chastity, however,

bears no necessary relation to clothing; some travelers report that morals in Africa vary inversely as the amount of dress. It is clear that what men are ashamed of depends entirely upon the local taboos and customs of their group. Until recently a Chinese woman was ashamed to show her foot, an Arab woman her face, a Tuareg woman her mouth; but the women of ancient Egypt, of nineteenth-century India and of twentieth-century Bali (before prurient tourists came) never thought of shame at the exposure of their breasts.

We must not conclude that morals are worthless because they differ according to time and place, and that it would be wise to show our historic learning by at once discarding the moral customs of our group. A little anthropology is a dangerous thing. It is substantially true that—as Anatole France ironically expressed the matter—"morality is the sum of the prejudices of a community"; and that, as Anacharsis put it among the Greeks, if one were to bring together all customs considered sacred by some group, and were then to take away all customs considered immoral by some group, nothing would remain. But this does not prove the worthlessness of morals; it only shows in what varied ways social order has been preserved. Social order is none the less necessary; the game must still have rules in order to be played; men must know what to expect of one another in the ordinary circumstances of life. Hence the unanimity with which the members of a society practice its moral code is quite as important as the contents of that code. Our heroic rejection of the customs and morals of our tribe, upon our adolescent discovery of their relativity, betrays the immaturity of our minds; given another decade and we begin to understand that there may be more wisdom in the moral code of the group—the formulated experience of generations of the race—than can be explained in a college course. Sooner or later the disturbing realization comes to us that even that which we cannot understand may be true. The institutions, conventions, customs and laws that make up the complex structure of a society are the work of a hundred centuries and a billion minds; and one mind must not expect to comprehend them in one lifetime, much less in twenty years. We are warranted in concluding that morals are relative, and indispensable.

Since old and basic customs represent a natural selection of group ways after centuries of trial and error, we must expect to find some social utility, or survival value, in virginity and modesty, despite their historical relativity, their association with marriage by purchase, and their contributions to neurosis. Modesty was a strategic retreat which enabled the girl, where she had any choice, to select her mate more deliberately, or compel him to show finer qualities before winning her; and the very obstructions it raised against desire generated those sentiments of romantic love which heightened her value in his eyes. The inculcation of virginity destroyed the naturalness and ease of primitive sexual life; but, by discouraging early sex development and premature motherhood, it lessened the gap—which tends to widen disruptively as civilization develops—between economic and sexual maturity. Probably it served in this way to strengthen the individual physically and mentally, to lengthen adolescence and training, and so to lift the level of the race.

As the institution of property developed, adultery graduated from a venial into a moral sin. Half of the primitive peoples known to us attach no great importance to it." The rise of property not only led to the exaction of complete fidelity from the woman, but generated in the male a proprietary

attitude towards her; even when he lent her to a guest it was because she belonged to him in body and soul. *Suttee* was the completion of this conception; the woman must go down into the master's grave along with his other belongings. Under the patriarchy adultery was classed with theft;" it was, so to speak, an infringement of patent. Punishment for it varied through all degrees of severity from the indifference of the simpler tribes to the disembowelment of adulteresses among certain California Indians. After centuries of punishment the new virtue of wifely fidelity was firmly established, and had generated an appropriate conscience in the feminine heart. Many Indian tribes surprised their conquerors by the unapproachable virtue of their squaws; and certain male travelers have hoped that the women of Europe and America might some day equal in marital faithfulness the wives of the Zulus and the Papuans.

It was easier for the Papuans, since among them, as among most primitive peoples, there were few impediments to the divorce of the woman by the man. Unions seldom lasted more than a few years among the American Indians. "A large proportion of the old and middle-aged men," says Schoolcraft, "have had many different wives, and their children, scattered around the country, are unknown to them." They "laugh at Europeans for having only one wife, and that for life; they consider that the Good Spirit formed them to be happy, and not to continue together unless their tempers and dispositions were congenial." The Cherokees changed wives three or four times a year; the conservative Samoans kept them as long as three years.'^c With the coming of a settled agricultural life, unions became more permanent. Under the patriarchal system the man found it uneconomical to divorce a wife, for this meant, in effect, to lose a profitable slave.... As the family became the productive unit of society, tilling the soil together, it prospered—other things equal—according to its size and cohesion; it was found to some advantage that the union of the mates should continue until the last child was reared. By that time no energy remained for a new romance, and the lives of the parents had been forged into one by common work and trials. Only with the passage to urban industry, and the consequent reduction of the family in size and economic importance, has divorce become widespread again.

In general, throughout history, men have wanted many children, and therefore have called motherhood sacred; while women, who know more about reproduction, have secretly rebelled against this heavy assignment, and have used an endless variety of means to reduce the burdens of maternity. Primitive men do not usually care to restrict population; under normal conditions children are profitable, and the male regrets only that they cannot all be sons. It is the woman who invents abortion, infanticide and contraception—for even the last occurs, sporadically, among primitive peoples.'^c It is astonishing to find how similar are the motives of the "savage" to the "civilized" woman in preventing birth: to escape the burden of rearing offspring, to preserve a youthful figure, to avert the disgrace of extramarital motherhood, to avoid death, etc. The simplest means of reducing maternity was the refusal of the man by the woman during the period of nursing, which might be prolonged for many years. Sometimes, as among the Cheyenne Indians, the women developed the custom of refusing to bear a second child until the first was ten years old. In New Britain the women had no children till two or four years after marriage.

The Guaycurus of Brazil were constantly diminishing because the women would bear no children till the age of thirty. Among the Papuans abortion was frequent; "children are burdensome," said the women; "we are weary of them; we go dead." Some Maori tribes used herbs or induced artificial malposition of the uterus, to prevent conception.

When abortion failed, infanticide remained. Most nature peoples permitted the killing of the newborn child if it was deformed, or diseased, or a bastard, or if its mother had died in giving it birth. As if any reason would be good in the task of limiting population to the available means of subsistence, many tribes killed infants whom they considered to have been born under unlucky circumstances: so the Bondei natives strangled all children who entered the world headfirst; the Kamchadals killed babes born in stormy weather; Madagascar tribes exposed, drowned, or buried alive children who made their *debut* in March or April, or on a Wednesday or a Friday, or in the last week of the month. If a woman gave birth to twins it was, in some tribes, held proof of adultery, since no man could be the father of two children at the same time; and therefore one or both of the children suffered death. The practice of infanticide was particularly prevalent among nomads, who found children a problem on their long marches. The Bangerang tribe of Victoria killed half their children at birth; the Lenguas of the Paraguayan Chaco allowed only one child per family per seven years to survive; the Ahipones achieved a French economy in population by rearing a boy and a girl in each household, killing off other offspring as fast as they appeared. Where famine conditions existed or threatened, most tribes strangled the newborn, and some tribes ate them. Usually it was the girl that was most subject to infanticide; occasionally she was tortured to death with a view to inducing the soul to appear, in its next incarnation, in the form of a boy." Infanticide was practiced without cruelty and without remorse; for in the first moments after delivery, apparently, the mother felt no instinctive love for the child.

Once the child had been permitted to live a few days, it was safe against infanticide; soon parental love was evoked by its helpless simplicity, and in most cases it was treated more affectionately by its primitive parents than the average child of the higher races. For lack of milk or soft food the mother nursed the child from two to four years, sometimes for twelve; one traveler describes a boy who had learned to smoke before he was weaned; and often a youngster running about with other children would interrupt his play-or his work-to go and be nursed by his mother." The Negro mother at work carried her infant on her back, and sometimes fed it by slinging her breasts over her shoulder.' Primitive discipline was indulgent but not ruinous; at an early age the child was left to face for itself the consequences of its stupidity, its insolence, or its pugnacity; and learning went on apace. Filial, as well as parental, love was highly developed in natural society."

Dangers and disease were frequent in primitive childhood, and mortality was high. Youth was brief, for at an early age marital and martial responsibility began, and soon the individual was lost in the heavy tasks of replenishing and defending the group. The women were consumed in caring for children, the men in providing for them. When the youngest child had been reared the parents were worn out; as little space remained for individual life at the end as at the beginning. Individualism, like liberty, is a luxury of civilization. Only with the dawn of history were a sufficient number of men

and women freed from the burdens of hunger, reproduction and war to create the intangible values of leisure, culture.

III. SOCIAL MORALITY

The nature of virtue and vice-Greed-Dishonesty-Violence- Homicide-Suicide-The socialization of the individual-Altruism-Hospitality-Manners-Tribal limits of morality-Primitive vs.modern morals-Religion and morals

Part of the function of parentage is the transmission of a moral code. For the child is more animal than human; it has humanity thrust upon it day by day as it receives the moral and mental heritage of the race. Bio-logically it is badly equipped for civilization, since its instincts provide only for traditional and basic situations, and include impulses more adapted to the jungle than to the town. Every vice was once a virtue, necessary in the struggle for existence; it became a vice only when it survived the conditions that made it indispensable; a vice, therefore, is not an advanced form of behavior, but usually an atavistic throwback to ancient and superseded ways. It is one purpose of a moral code to adjust the unchanged-or slowly changing-impulses of human nature to the changing needs and circumstances of social life.

Greed, acquisitiveness, dishonesty, cruelty and violence were for so many generations useful to animals and men that not all our laws, our education, our morals and our religions can quite stamp them out; some of them, doubtless, have a certain survival value even today. The animal gorges himself because he does not know when he may find food again; this uncertainty is the origin of greed. The Yakuts have been known to eat forty pounds of meat in one day; and similar stories, only less heroic, are told of the Eskimos and the natives of Australia." Economic security is too recent an achievement of civilization to have eliminated this natural greed; it still appears in the insatiable acquisitiveness whereby the fretful modern man or woman stores up gold, or other goods, that may in emergency be turned into food. Greed for drink is not as widespread as greed for food, for most human aggregations have centered around some water supply. Nevertheless, the drinking of intoxicants is almost universal; not so much because men are greedy as because they are cold and wish to be warmed, or unhappy and wish to forget-or simply because the water available to them is not fit to drink.

Dishonesty is not so ancient as greed, for hunger is older than property. The simplest "savages" seem to be the most honest: "Their word is sacred," said Kolben of the Hottentots; they know "nothing of the corruptness and faithless arts of Europe." As international communications improved, this naive honesty disappeared; Europe has taught the gentle art to the Hottentots. In general, dishonesty rises with civilization, because under civilization the stakes of diplomacy are larger, there are more things to be stolen, and education makes men clever. When property develops among primitive men, lying and stealing come in its train."

Crimes of violence are as old as greed; the struggle for food, land and mates has in every generation fed the earth with blood, and has offered a dark background for the fitful light of civilization. Primitive man was cruel because he had to be; life taught him that he must have an arm always ready to strike, and a heart apt for "natural killing." The blackest page in anthropology is the story of primitive torture, and of the joy that many primitive men and women

seem to have taken in the infliction of pain." Much of this cruelty was associated with war; within the tribe manners were less ferocious, and primitive men treated one another-and even their slaves-with a quite civilized kindness.., But since men had to kill vigorously in war, they learned to kill also in time of peace; for to many a primitive mind no argument is settled until one of the disputants is dead. Among many tribes murder, even of another member of the same clan, aroused far less horror than it used to do with us. The Fuegians punished a murderer merely by exiling him until his fellows had forgotten his crime. The Kaffirs considered a murderer unclean, and required that he should blacken his face with charcoal; but after a while, if he washed himself, rinsed his mouth, and dyed himself brown, he was received into society again. The savages of Futuna, like our own, looked upon a murderer as a hero. In several tribes no woman would marry a man who had not killed some one, in fair fight or foul; hence the practice of head-hunting, which survives in the Philippines today. The Dyak who brought back most heads from such a man-hunt had the choice of all the girls in his village; these were eager for his favors, feeling that through him they might become the mothers of brave and potent men....

Where food is dear life is cheap. Eskimo sons must kill their parents when these have become so old as to be helpless and useless; failure to kill them in such cases would be considered a breach of filial duty." Even his own life seems cheap to primitive man, for he kills himself with a readiness rivaled only by the Japanese. If an offended person commits suicide, or mutilates himself, the offender must imitate him or become a pariah;" so old is *hara-kiri*. Any reason may suffice for suicide: some Indian women of North America killed themselves because their men had assumed the privilege of scolding them; and a young Trobriand Islander committed suicide because his wife had smoked all his tobacco(This is half the theme of Synge's drama, *The Playboy of the Western World*.)

To transmute greed into thrift, violence into argument, murder into litigation, and suicide into philosophy has been part of the task of civilization. It was a great advance when the strong consented to eat the weak by due process of law. No society can survive if it allows its members to behave toward one another in the same way in which it encourages them to behave as a group toward other groups; internal cooperation is the first law of external competition. The struggle for existence is not ended by mutual aid, it is incorporated, or transferred to the group. Other things equal, the ability to compete with rival groups will be proportionate to the ability of the individual members and families to combine with one another. Hence every society inculcates a moral code, and builds up in the heart of the individual, as its secret allies and aides, social dispositions that mitigate the natural war of life; it encourages-by calling them virtues-those qualities or habits in the individual which redound to the advantage of the group, and discourages contrary qualities by calling them vices. In this way the individual is in some outward measure socialized, and the animal becomes a citizen.

It was hardly more difficult to generate social sentiments in the soul of the "savage" than it is to raise them now in the heart of modern man. The struggle for life encouraged communalism, but the struggle for property intensifies individualism. Primitive man was perhaps readier than contemporary man to cooperate with his fellows; social solidarity came more

easily to him since he had more perils and interests in common with his group, and less possessions to separate him from the rest." The natural man was violent and greedy; but he was also kindly and generous, ready to share even with strangers, and to make presents to his guests.⁹ Every schoolboy knows that primitive hospitality, in many tribes, went to the extent of offering to the traveler the wife or daughter of the host." To decline such an offer was a serious offense, not only to the host but to the woman; these are among the perils faced by missionaries. Often the later treatment of the guest was determined by the manner in which he had acquitted himself of these responsibilities. Uncivilized man appears to have felt proprietary, but not sexual, jealousy; it did not disturb him that his wife had "known" men before marrying him, or now slept with his guest; but as her owner, rather than her lover, he would have been incensed to find her cohabiting with another man without his consent. Some African husbands lent their wives to strangers for a consideration.

The rules of courtesy were as complex in most simple peoples as in advanced nations." Each group had formal modes of salutation and farewell. Two individuals, on meeting, rubbed noses, or smelled each other, or gently bit each other; as we have seen, they never kissed. Some crude tribes were more polite than the modern average; the Dyak head-hunters, we are told, were "gentle and peaceful" in their home life, and the Indians of Central America considered the loud talking and brusque behavior of the white man as signs of poor breeding and a primitive culture.

Almost all groups agree in holding other groups to be inferior to themselves. The American Indians looked upon themselves as the chosen people, specially created by the Great Spirit as an uplifting example for mankind. One Indian tribe called itself "The Only Men"; another called itself "Men of Men"; the Caribs said, "We alone are people." The Eskimos believed that the Europeans had come to Greenland to learn manners and virtues.⁹ Consequently it seldom occurred to primitive man to extend to other tribes the moral restraints which he acknowledged in dealing with his own; he frankly conceived it to be the function of morals to give strength and coherence to his group against other groups. Commandments and taboos applied only to the people of his tribe; with others, except when they were his guests, he might go as far as he dared."

Moral progress in history lies not so much in the improvement of the moral code as in the enlargement of the area within which it is applied. The morals of modern man are not unquestionably superior to those of primitive man, though the two groups of codes may differ considerably in content, practice and profession; but modern morals are, in normal times, extended though with decreasing intensity to a greater number of people than before.⁹ As tribes were gathered up into those larger units called states, morality overflowed its tribal bounds; and as communication or a common danger united and assimilated states, morals seeped through frontiers, and some men began to apply their commandments to all Europeans, to all whites, at last to all men. Perhaps there have always been

⁹ However, the range within which the moral code is applied has narrowed since the Middle Ages, as the result of the rise of nationalism.

idealists who wished to love all men as their neighbors, and perhaps in every generation they have been futile voices crying in a wilderness of nationalism and war. But probably the number—even the relative number—of such men has increased. There are no morals in diplomacy, and *la politique n'a pas d'entrailles*; but there are morals in international trade, merely because such trade cannot go on without some degree of restraint, regulation, and confidence. Trade began in piracy; it culminates in morality.

Few societies have been content to rest their moral codes upon so frankly rational a basis as economic and political utility. For the individual is not endowed by nature with any disposition to subordinate his personal interests to those of the group, or to obey irksome regulations for which there are no visible means of enforcement. To provide, so to speak, an invisible watchman, to strengthen the social impulses against the individualistic by powerful hopes and fears, societies have not invented but made use of, religion. The ancient geographer Strabo expressed the most advanced views on this subject nineteen hundred years ago:

For in dealing with a crowd of women, at least, or with any promiscuous mob, a philosopher cannot influence them by reason or exhort them to reverence, piety and faith; nay, there is need of religious fear also, and this cannot be aroused without myths and marvels. For thunderbolt, aegis, trident, torches, snakes, thyrsus lances, arms of the gods—are myths, and so is the entire ancient theology. But the founders of states gave their sanction to these things as bugbears wherewith to scare the simple-minded. Now since this is the nature of mythology, and since it has come to have its place in the social and civil scheme of life as well as in the history of actual facts, the ancients clung to their system of education for children and applied it up to the age of maturity; and by means of poetry they believed that they could satisfactorily discipline every period of life. But now, after a long time, the writing of history and the present-day philosophy have come to the front. Philosophy, however, is for the few, whereas poetry is more useful to the people at large...

Morals, then, are soon endowed with religious sanctions, because mystery and supernaturalism lend a weight which can never attach to things empirically known and genetically understood; men are more easily ruled by imagination than by science. But was this moral utility the source or origin of religion?

IV. RELIGION

Primitive atheists

If we define religion as the worship of supernatural forces, we must observe at the outset that some peoples have apparently no religion at all. Certain Pygmy tribes of Africa had no observable cult or rites; they had no totem, no fetishes, and no gods; they buried their dead without ceremony, and seem to have paid no further attention to them; they lacked even superstitions, if we may believe otherwise incredible travelers. "The dwarfs of the Cameroon recognized only malevolent deities, and did nothing to placate them, on the ground that it was useless to try. The Veddahs of Ceylon went no further than to admit the possibility of gods and immortal souls; but they offered no prayers or sacrifices. Asked about God they answered, as puzzled as the latest philosopher: "Is he on a rock? On a white-ant hill? On a tree? I never saw a god!" The North American Indians conceived a god, but did not

worship him; like Epicurus they thought him too remote to be concerned in their affairs.... An Abipone Indian rebuffed a metaphysical inquirer in a manner quite Confucian: "Our grandfathers and our great-grandfathers were wont to contemplate the earth alone, solicitous only to see whether the plain afford grass and water for their horses. They never troubled themselves about what went on in the heavens, and who was the creator and governor of the stars." The Eskimos, when asked who had made the heavens and the earth, always replied, "We do not know." A Zulu was asked: "When you see the sun rising and setting, and the trees growing, do you know who made them and governs them?" He answered, simply: "No, we see them, but cannot tell how they came; we suppose that they came by themselves."

Such cases are exceptional, and the old belief that religion is universal is substantially correct. To the philosopher this is one of the outstanding facts of history and psychology; he is not content to know that all religions contain much nonsense, but rather he is fascinated by the problem of the antiquity and persistence of belief. What are the sources of the indestructible piety of mankind?

1. The Sources of Religion

ear-Wonder-Dreams-The soul-Animism

Fear, as Lucretius said, was the first mother of the gods. Fear, above all, of death. Primitive life was beset with a thousand dangers, and seldom ended with natural decay; long before old age could come, violence or some strange disease carried off the great majority of men. Hence early man did not believe that death was ever natural; he attributed it to the operation of supernatural agencies. In the mythology of the natives of New Britain death came to men by an error of the gods. The good god Kambinana told his foolish brother Korvouva, "Go down to men and tell them to cast their skins; so shall they avoid death. But tell the serpents that they must henceforth die." Korvouva mixed the messages; he delivered the secret of immortality to the snakes, and the doom of death to men. "Many tribes thought that death was due to the shrinkage of the skin, and that man would be immortal if only he could moult."

Fear of death, wonder at the causes of chance events or unintelligible happenings, hope for divine aid and gratitude for good fortune, cooperated to generate religious belief. Wonder and mystery adhered particularly to sex and dreams, and the mysterious influence of heavenly bodies upon the earth and man. Primitive man marveled at the phantoms that he saw in sleep, and was struck with terror when he beheld, in his dreams, the figures of those whom he knew to be dead. He buried his dead in the earth to prevent their return; he buried victuals and goods with the corpse lest it should come back to curse him; sometimes he left to the dead the house in which death had come, while he himself moved on to another shelter; in some places he carried the body out of the house not through a door but through a hole in the wall, and bore it rapidly three times around the dwelling, so that the spirit might forget the entrance and never haunt the home."

Such experiences convinced early man that every living thing had a soul, or secret life, within it, which could be separated from the body in illness, sleep or death. "Let no one wake a man brusquely," said one of the Upanishads of ancient India, "for it is a matter difficult of cure if the soul find not its way

back to him.”““ Not man alone but all things had souls; the external world was not insensitive or dead, it was intensely alive;.. if this were not so, thought primitive philosophy, nature would be full of inexplicable occurrences, like the motion of the sun, or the death-dealing lightning, or the whispering of the trees. The personal way of conceiving objects and events preceded the impersonal or abstract; religion preceded philosophy. Such animism is the poetry of religion, and the religion of poetry. We may see it at its lowest in the wonder-struck eyes of a dog that watches a paper blown before him by the wind, and perhaps believes that a spirit moves the paper from within; and we find the same feeling at its highest in the language of the poet. To the primitive mind- and to the poet in all ages-mountains, rivers, rocks, trees, stars, sun, moon and sky are sacramentally holy things, because they are the outward and visible signs of inward and invisible souls. To the early Greeks the sky was the god Ouranos, the moon was Selene, the earth was Grea, the sea was Poseidon, and everywhere in the woods was Pan. To the ancient Germans the forest primeval was peopled with genii, elves, trolls, giants, dwarfs and fairies; these sylvan creatures survive in the music of Wagner and the poetic dramas of Ibsen. The simpler peasants of Ireland still believe in fairies, and no poet or playwright can belong to the Irish literary revival unless he employs them. There is wisdom as well as beauty in this animism; it is good and nourishing to treat all things as alive. To the sensitive spirit, says the most sensitive of contemporary writers,;

Nature begins to present herself as a vast congeries of separate living entities, some visible, some invisible, but all possessed of mind-stuff, all possessed of matter-stuff, and all blending mind and matter together in the basic mystery of being. . . .The world is full of gods! From every planet and from every stone there emanates a presence that disturbs us with a sense of the multitudinousness of god-like powers, strong and feeble, great and little, moving between heaven and earth upon their secret purposes.'

2. The Objects of Religion

The sun-The stars-The earth-Sex-Animals-Totemism-The transition to human gods-Ghost-worship-Ancestor-worship

Since all things have souls, or contain hidden gods, the objects of religious worship are numberless. They fall into six classes: celestial, terrestrial, sexual, animal, human, and divine. Of course we shall never know which of our universe of objects was worshiped first. *One* of the first was probably the moon. Just as our own folk-lore speaks of the "*man* in the moon," so primitive legend conceived the moon as a bold male who caused women to menstruate by seducing them. He was a favorite god with women, who worshiped him as their protecting deity. The pale orb was also the measure of time; it was believed to control the weather, and to make both rain and snow; even the frogs prayed to it for rain.”“

We do not know when the sun replaced the moon as the lord of the sky in primitive religion. Perhaps it was when vegetation replaced hunting, and the transit of the sun determined the seasons of sowing and reaping, and its heat was recognized as the main cause of the bounty of the soil. Then the earth became a goddess fertilized by the hot rays, and men worshiped the great orb as the father of all things living.- From this simple beginning sun-worship passed down into the pagan faiths of antiquity, and many a later

god was only a personification of the sun. Anaxagoras was exiled by the learned Greeks because he ventured the guess that the sun was not a god, but merely a ball of fire, about the size of the Peloponnesus. The Middle Ages kept a relic of sun-worship in the halo pictured around the heads of saints," and in our own day the Emperor of Japan is regarded by most of his people as an incarnation of the sun-god." There is hardly any superstition so old but it can be found flourishing somewhere today. Civilization is the precarious labor and luxury of a minority; the basic masses of mankind hardly change from millennium to millennium.

Like the sun and the moon, every star contained or was a god, and moved at the command of its indwelling spirit. Under Christianity these spirits became guiding angels, star-pilots, so to speak; and Kepler was not too scientific to believe in them. The sky itself was a great god, worshiped devotedly as giver and withholder of rain. Among many primitive peoples the word for god meant sky; among the Lubari and the Dinkas it meant rain. Among the Mongols the supreme god was *Tengri-the sky*; in China it was *Ti-the sky*; in Vedic India it was *Dyaus pitar-the "father sky"*; among the Greeks it was *Zeus-the sky*, the "cloud-compeller"; among the Persians it was *Ahura-the "azure sky"*,^{10a} and among ourselves men still ask "Heaven" to protect them. The central point in most primitive mythology is the fertile mating of earth and sky.

For the earth, too, was a god, and every main aspect of it was presided over by some deity. Trees had souls quite as much as men, and it was plain murder to cut them down; the North American Indians sometimes attributed their defeat and decay to the fact that the whites had leveled the trees whose spirits had protected the Red Men. In the Molucca Islands blossoming trees were treated as pregnant; no noise, fire, or other disturbance was permitted to mar their peace; else, like a frightened woman, they might drop their fruit before time. In Amboyna no loud sounds were allowed near the rice in bloom lest it should abort into straw.... The ancient Gauls worshiped the trees of certain sacred forests; and the Druid priests of England revered as holy that mistletoe of the oak which still suggests a pleasant ritual. The veneration of trees, springs, rivers and mountains is the oldest traceable religion of Asia." Many mountains were holy places, homes of thundering gods. Earthquakes were the shoulder-shrugging of irked or irate deities: the Fijians ascribed such agitations to the earth-god's turning over in his sleep; and the Samoans, when the soil trembled, gnawed the ground and prayed to the god Mafuie to stop, lest he should shake the planet to pieces. Almost everywhere the earth was the Great Mother; our language, which is often the precipitate of primitive or unconscious beliefs, suggests to this day a kinship between matter (*materia*) and mother (*mater*).^{ru} Ishtar and Cybele, Demeter and Ceres, Aphrodite and Venus and Freya-these are comparatively late forms of the ancient goddesses of the earth, whose fertility constituted the bounty of the fields; their birth and marriage, their death and triumphant resurrection were conceived as the symbols or causes of the sprouting, the decay, and the vernal renewal of all vegetation. These deities reveal by their gender the primitive association of agriculture with woman. When agriculture became the dominant mode of human life, the vegetation goddesses reigned supreme. Most early gods were of the gentler sex; they were superseded by male deities presumably as a heavenly reflex of the victorious patriarchal family.

Just as the profound poetry of the primitive mind sees a secret divinity in the growth of a tree, so it sees a supernatural agency in the conception or birth of a child. The "savage" does not know anything about the ovum or the sperm; he sees only the external structures involved, and deifies them; they, too, have spirits in them, and must be worshiped, for are not these mysteriously creative powers the most marvelous of all? In them, even more than in the soil, the miracle of fertility and growth appears; therefore they must be the most direct embodiments of the divine potency. Nearly all ancient peoples worshiped sex in some form and ritual, and not the lowest people but the highest expressed their worship most completely; we shall find such worship in Egypt and India, Babylonia and Assyria, Greece and Rome. The sexual character and functions of primitive deities were held in high regard, "not through any obscenity of mind, but through a passion for fertility in women and in the earth. Certain animals, like the bull and the snake, were worshiped as apparently possessing or symbolizing in a high degree the divine power of reproduction. The snake in the story of Eden is doubtless a phallic symbol, representing sex as the origin of evil, suggesting sexual awakening as the beginning of the knowledge of good and evil, and perhaps insinuating a certain proverbial connection between mental innocence and bliss.

There is hardly an animal in nature, from the Egyptian scarab to the Hindu elephant, that has not somewhere been worshiped as a god. The Ojibwa Indians gave the name of *totem* to their special sacred animal, to the clan that worshiped it, and to any member of the clan; and this confused word has stumbled into anthropology as *totemism*, denoting vaguely any worship of a particular object—usually an animal or a plant—as especially sacred to a group. Varieties of totemism have been found scattered over apparently unconnected regions of the earth, from the Indian tribes of North America to the natives of Africa, the Dravidians of India, and the tribes of Australia." The totem as a religious object helped to unify the tribe, whose members thought themselves bound up with it or descended from it; the Iroquois, in semi-Darwinian fashion, believed that they were sprung from the primeval mating of women with bears, wolves and deer. The totem-as object or as symbol—became a useful sign of relationship and distinction for primitive peoples, and lapsed, in the course of secularization, into a mascot or emblem, like the lion or eagle of nations, the elk or moose of our fraternal orders, and those dumb animals that are used to represent the elephantine immobility and mulish obstreperousness of our political parties. The dove, the fish and the lamb, in the symbolism of nascent Christianity, were relics of totemic adoration; even the lowly pig was once a totem of prehistoric Jews." In most cases the totem animal was taboo—i.e., forbidden, not to be touched; under certain circumstances it might be eaten, but only as a religious act, amounting to the ritual eating of the god. (Freud, with characteristic imaginativeness, believes that the totem was a transfigured symbol of the father, revered and hated for his omnipotence, and rebelliously murdered and eaten by his sons. Durkheim thought that the totem was a symbol of the clan, revered and hated {hence held "sacred" and "unclean"} by the individual for its omnipotence and irksome dictatorship; and that the religious attitude was originally the feeling of the individual toward the authoritarian group. The Gallas of Abyssinia ate in solemn ceremony the fish that they worshiped, and said, "We feel the spirit moving within us

as we cat." The good missionaries who preached the Gospel to the Gallas were shocked to find among these simple folk a ritual so strangely similar to the central ceremony of the Mass.

Probably fear was the origin of totemism, as of so many cults; men prayed to animals because the animals were powerful, and had to be appeased. As hunting cleared the woods of the beasts, and gave way to the comparative security of agricultural life, the worship of animals declined, though it never quite disappeared; and the ferocity of the first human gods was probably carried over from the animal deities whom they replaced. The transition is visible in those famous stories of metamorphoses, or changes of form, that are found in the Ovids of all languages, and tell how gods had been, or had become, animals. Later the animal qualities adhered to them obstinately, as the odor of the stable might loyally attend some rural Casanova; even in the complex mind of Homer *glaukopis Athene* had the eyes of an owl, and *Here boopis* had the eyes of a cow. Egyptian and Babylonian gods or ogres with the face of a human being and the body of a beast reveal the same transition and make the same confession-that many human gods were once animal deities....

Most human gods, however, seem to have been, in the beginning, merely idealized dead men. The appearance of the dead in dreams was enough to establish the worship of the dead, for worship, if not the child, is at least the brother, of fear. Men who had been powerful during life, and therefore had been feared, were especially to be worshiped after their death.' Among several primitive peoples the word for god actually meant "a dead man"; even today the English word *spirit* and the German word *Geist* mean both ghost and soul. The Greeks invoked their dead precisely as the Christians were to invoke the saints." So strong was the belief- first generated in dreams-in the continued life of the dead, that primitive men sometimes sent messages to them in the most literal way; in one tribe the chief, to convey such a letter, recited it verbally to a slave, and then cut off his head for special delivery; if the chief forgot something he sent another decapitated slave as a postscript.

Gradually the cult of the ghost became the worship of ancestors. All the dead were feared, and had to be propitiated, lest they should curse and blight the lives of the living. This ancestor-worship was so well adapted to promote social authority and continuity, conservatism and order, that it soon spread to every region of the earth. It flourished in Egypt, Greece and Rome, and survives vigorously in China and Japan today; many peoples worship ancestors but no god (Relics of ancestor-worship may be found among ourselves in our care and visitation of graves, and our masses and prayers for the dead). The institution held the family power- fully together despite the hostility of successive generations, and provided an invisible structure for many early societies. And just as compulsion grew into conscience, so fear graduated into love; the ritual of ancestor- worship, probably generated by terror, later aroused the sentiment of awe, and finally developed piety and devotion. It is the tendency of gods to begin as ogres and to end as loving fathers; the idol passes into an ideal as the growing security, peacefulness and moral sense of the worshipers pacify and transform the features of their once ferocious deities. The slow progress of civilization is reflected in the tardy amiability of the gods.

The idea of a human god was a late step in a long development; it was slowly differentiated, through many stages, out of the conception of an ocean

or multitude of spirits and ghosts surrounding and inhabiting everything. From the fear and worship of vague and formless spirits men seem to have passed to adoration of celestial, vegetative and sexual powers, then to reverence for animals, and worship of ancestors. The notion of God as Father was probably derived from ancestor-worship; it meant originally that men had been physically begotten by the gods." In primitive theology there is no sharp or generic distinction between gods and men; to the early Greeks, for example, their gods were ancestors, and their ancestors were gods. A further development came when, out of the medley of ancestors, certain men and women who had been especially distinguished were singled out for clearer deification; so the greater kings became gods, sometimes even before their death. But with this development we reach the historic civilizations.

3. The Methods of Religion

*Magic-Vegetation rites-Festivals of license-Myths of the resurrected god
—Magic and superstition — Magic and science-Priests*

Having conceived a world of spirits, whose nature and intent were unknown to him, primitive man sought to propitiate them and to enlist them in his aid. Hence to animism, which is the essence of primitive religion, was added magic, which is the soul of primitive ritual. The Polynesians recognized a very ocean of magic power, which they called *mana*; the magician, they thought, merely tapped this infinite supply of miraculous capacity. The methods by which the spirits, and later the gods, were suborned to human purposes were for the most part "sympathetic magic"—a desired action was suggested to the deities by a partial or imitative performance of the action by men. To make rain fall some primitive magicians poured water out upon the ground, preferably from a tree. The Kaffirs, threatened by drought, asked a missionary to go into the fields with an opened umbrella. In Sumatra a barren woman made an image of a child and held it in her lap, hoping thereby to become pregnant. In the Babar Archipelago the would-be mother fashioned a doll out of red cotton, pretended to suckle it, and repeated a magic formula; then she sent word through the village that she was pregnant, and her friends came to congratulate her; only a very obstinate reality could refuse to emulate this imagination. Among the Dyaks of Borneo the magician, to ease the pains of a woman about to deliver, would go through the contortions of childbirth himself, as a magic suggestion to the foetus to come forth; sometimes the magician slowly rolled a stone down his belly and dropped it to the ground, in the hope that the backward child would imitate it. In the Middle Ages a spell was cast upon an enemy by sticking pins into a waxen image of him;... the Peruvian Indians burned people in effigy, and called it burning the soul,.. Even the modern mob is not above such primitive magic.

These methods of suggestion by example were applied especially to the fertilization of the soil. Zulu medicine-men fried the genitals of a man who had died in full vigor, ground the mixture into a powder, and strewed it over the fields.... Some peoples chose a King and Queen of the May, or a Whitsun bridegroom and bride, and married them publicly, so that the soil might take heed and flower forth. In certain localities the rite included the public consummation of the marriage, so that Nature, though she might be nothing but a dull clod, would have no excuse for misunderstanding her duty. In Java the peasants and their wives, to ensure the fertility of the rice-fields, mated in the midst of them." For primitive men did not conceive the growth of the

soil in terms of nitrogen; they thought of it-apparently without knowing of sex in plants-in the same terms as those whereby they interpreted the fruitfulness of woman; our very terms recall their poetic faith.

Festivals of promiscuity, coming in nearly all cases at the season of sowing, served partly as a moratorium on morals (recalling the comparative freedom of sex relations in earlier days), partly as a means of fertilizing the wives of sterile men, and partly as a ceremony of suggestion to the earth in spring to abandon her wintry reserve, accept the proffered seed, and prepare to deliver herself of a generous litter of food. Such festivals appear among a great number of nature peoples, but particularly among the Cameroons of the Congo, the Kaffirs, the Hottentots and the Bantus. "Their harvest festivals," says the Reverend H. Rowley of the Bantus, are akin in character to the feasts of Bacchus. . . . It is impossible to witness them without being ashamed. . . . Not only is full sexual license permitted to the neophytes, and indeed in most cases enjoined, but any visitor attending the festival is encouraged to indulge in licentiousness. Prostitution is freely indulged in, and adultery is not viewed with any sense of heinousness, on account of the surroundings. No man attending the festival is allowed to have intercourse with his wife.

Similar festivals appear in the historic civilizations: in the Bacchic celebrations of Greece, the *Saturnalia* of Rome, the *Fete des Fous* in medieval France, May Day in England, and the Carnival or *Mardi Gras* of contemporary ways.

Here and there, as among the Pawnees and the Indians of Guayaquil, vegetation rites took on a less attractive form. A man-or, in later and milder days, an animal-was sacrificed to the earth at sowing time, so that it might be fertilized by his blood. When the harvest came it was interpreted as the resurrection of the dead man; the victim was given, before and after his death, the honors of a god; and from this origin arose, in a thousand forms, the almost universal myth of a god dying for his people, and then returning triumphantly to life. Poetry embroidered magic, and transformed it into theology. Solar myths mingled harmoniously with vegetation rites, and the legend of a god dying and reborn came to apply not only to the winter death and spring revival of the earth but to the autumnal and vernal equinoxes, and the waning and waxing of the day. For the coming of night was merely a part of this tragic drama; daily the sun-god was born and died; every sunset was a crucifixion, and every sunrise was a resurrection.

Human sacrifice, of which we have here but one of many varieties, seems to have been honored at some time or another by almost every people. On the island of Carolina in the Gulf of Mexico a great hollow metal statue of an old Mexican deity has been found, within which still lay the remains of human beings apparently burned to death as an offering to the god." Every one knows of the Moloch to whom the Phoenicians, the Carthaginians, and occasionally other Semites, offered human victims. In our own time the custom has been practiced in Rhodesia." "Probably it was bound up with cannibalism; men thought that the gods had tastes like their own. As religious beliefs change more slowly than other creeds, and rites change more slowly than beliefs, this divine cannibalism survived after human cannibalism disappeared...Slowly, however, evolving morals changed even religious rites; the gods imitated the increasing gentleness of their worshipers, and resigned themselves to accepting animal instead of human meat; a hind took the place of

Iphigenia, and a ram was substituted for Abraham's son. In time the gods did not receive even the animal; the priests liked savory food, ate all the edible part of the sacrificial victim themselves, and offered upon the altar only the entrails and the bones.

Since early man believed that he acquired the powers of whatever organism he consumed, he came naturally to the conception of eating the god. In many cases he ate the flesh and drank the blood of the human god whom he had deified and fattened for the sacrifice. When, through increased continuity in the food-supply, he became more humane, he substituted images for the victim, and was content to eat these. In ancient Mexico an image of the god was made of grain, seeds and vegetables, was kneaded with the blood of boys sacrificed for the purpose, and was then consumed as a religious ceremony of eating the god. Similar ceremonies have been found in many primitive tribes. Usually the participant was required to fast before eating the sacred image; and the priest turned the image into the god by the power of magic formulas.'

Magic begins in superstition, and ends in science. A wilderness of weird beliefs came out of animism, and resulted in many strange formulas and rites. The Kukis encouraged themselves in war by the notion that all the enemies they slew would attend them as slaves in the after life. On the other hand a Bantu, when he had slain his foe, shaved his own head and anointed himself with goat-dung, to prevent the spirit of the dead man from returning to pester him. Almost all primitive peoples believed in the efficacy of curses, and the destructiveness of the "evil eye.". Australian natives were sure that the curse of a potent magician could kill at a hundred miles. The belief in witchcraft began early in human history, and has never quite disappeared. Fetichism (From the Portuguese *feitico*, fabricated or factitious) -the worship of idols or other objects as having magic power-is still more ancient and indestructible. Since many amulets are limited to a special power, some peoples are heavily laden with a variety of them, so that they may be ready for any emergency.'. Relics are a later and contemporary example of fetiches possessing magic powers; half the population of Europe wear some pendant or amulet which gives them supernatural protection or aid. At every step the history of civilization teaches us how slight and superficial a structure civilization is, and how precariously it is poised upon the apex of a never-extinct volcano of poor and oppressed barbarism, superstition and ignorance. Modernity is a cap superimposed upon the Middle Ages, which always remain.

The philosopher accepts gracefully this human need of supernatural aid and comfort, and consoles himself by observing that just as animism generates poetry, so magic begets drama and science. Frazer has shown, with the exaggeration natural to a brilliant innovator, that the glories of science have their roots in the absurdities of magic. For since magic often failed, it became of advantage to the magician to discover natural operations by which he might help supernatural forces to produce the desired event. Slowly the natural means came to predominate, even though the magician, to preserve his standing with the people, concealed these natural means as well as he could, and gave the credit to supernatural magic- much as our own people often credit natural cures to magical prescriptions and pills. In this way magic gave birth to the physician, the chemist, the metallurg, and the astronomer."

More immediately, however, magic made the priest. Gradually, as religious rites became more numerous and complex, they outgrew the knowledge and competence of the ordinary man, and generated a special class which gave most of its time to the functions and ceremonies of religion. The priest as magician had access, through trance, inspiration or esoteric prayer, to the will of the spirits or gods, and could change that will for human purposes. Since such knowledge and skill seemed to primitive men the most valuable of all, and supernatural forces were conceived to affect man's fate at every turn, the power of the clergy became as great as that of the state; and from the latest societies to modern times the priest has vied and alternated with the warrior in dominating and disciplining men. Let Egypt, Judea and medieval Europe suffice as instances.

The priest did not create religion, he merely used it, as a statesman uses the impulses and customs of mankind; religion arises not out of sacerdotal invention or chicanery, but out of the persistent wonder, fear, insecurity, hopefulness and loneliness of men. The priest did harm by tolerating superstition and monopolizing certain forms of knowledge; but he limited and often discouraged superstition, he gave the people the rudiments of education, he acted as a repository and vehicle for the growing cultural heritage of the race, he consoled the weak in their inevitable exploitation by the strong, and he became the agent through which religion nourished art and propped up with supernatural aid the precarious structure of human morality. If he had not existed the people would have invented him.

4. The Moral Function of Religion

Religion and government-Taboo-Sexual taboos- The lag of religion-Secularization

Religion supports morality by two means chiefly: myth and taboo. Myth creates the supernatural creed through which celestial sanctions may be given to forms of conduct socially (or sacerdotally) desirable; heavenly hopes and terrors inspire the individual to put up with restraints placed upon him by his masters and his group. Man is not naturally obedient, gentle, or chaste; and next to that ancient compulsion which finally generates conscience, nothing so quietly and continuously conduces to these uncongenial virtues as the fear of the gods. The institutions of property and marriage rest in some measure upon religious sanctions, and tend to lose their vigor in ages of unbelief. Government itself, which is the most unnatural and necessary of social mechanisms, has usually required the support of piety and the priest, as clever heretics like Napoleon and Mussolini soon discovered; and hence "a tendency to theocracy is incidental to all constitutions." The power of the primitive chief is increased by the aid of magic and sorcery; and even our own government derives some sanctity from its annual recognition of the Pilgrims' God.

The Polynesians gave the word *taboo* to prohibitions sanctioned by religion. In the more highly developed of primitive societies such taboos took the place of what under civilization became laws. Their form was usually negative: certain acts and objects were declared "sacred" or "unclean"; and the two words meant in effect one warning: *untouchable*. So the Ark of the Covenant was taboo, and Uzzah was struck dead, we are told, for touching it to save it from falling." Diodorus would have us believe that the ancient Egyptians ate one

another !n famine, rather than violate the taboo against eating the animal totem of the tribe!" In most primitive societies countless things were taboo; certain words and names were never to be pronounced, and certain days and seasons were taboo in the sense that work was forbidden at such times. All the knowledge, and some of the ignorance, of primitive men about food were expressed in dietetic taboos; and hygiene was inculcated by religion rather than by science or secular medicine.

The favorite object of primitive taboo was woman. A thousand superstitions made her, every now and then, untouchable, perilous, and "unclean." The moulders of the world's myths were unsuccessful husbands, for they agreed that woman was the root of all evil; this was a view sacred not only to Hebraic and Christian tradition, but to a hundred pagan mythologies. The strictest of primitive taboos was laid upon the menstruating woman; any man or thing that touched her at such times lost virtue or usefulness.'⁶ The Macusi of British Guiana forbade women to bathe at their periods lest they should poison the waters; and they forbade them to go into the forests on these occasions, lest they be bitten by enamored snakes." Even childbirth was unclean, and after it the mother was to purify herself with laborious religious rites. Sexual relations, in most primitive peoples, were taboo not only in the menstrual period but whenever the woman was pregnant or nursing. Probably these prohibitions were originated by women themselves, out of their own good sense and for their own protection and convenience; but origins are easily forgotten, and soon woman found herself "impure" and "unclean." In the end she accepted man's point of view, and felt shame in her periods, even in her pregnancy. Out of such taboos as a partial source came modesty, the sense of sin, the view of sex as unclean, asceticism, priestly celibacy, and the subjection of woman.

Religion is not the basis of morals, but an aid to them; conceivably they could exist without it, and not infrequently they have progressed against its indifference or its obstinate resistance. In the earliest societies, and in some later ones, morals appear at times to be quite independent of religion; religion then concerns itself not with the ethics of conduct but with magic, ritual and sacrifice, and the good man is defined in terms of ceremonies dutifully performed and faithfully financed. As a rule religion sanctions not any absolute good (since there is none), but those norms of conduct which have established themselves by force of economic and social circumstance; like law it looks to the past for its judgments, and is apt to be left behind as conditions change and morals alter with them. So the Greeks learned to abhor incest while their mythologies still honored incestuous gods; the Christians practiced monogamy while their Bible legalized polygamy; slavery was abolished while dominies sanctified it with unimpeachable Biblical authority; and in our own day the Church fights heroically for a moral code that the Industrial Revolution has obviously doomed. In the end terrestrial forces prevail; morals slowly adjust themselves to economic invention, and religion reluctantly adjusts itself to moral change¹⁰. The moral function of religion is to conserve established values, rather than to create new ones.

Hence a certain tension between religion and society marks the higher stages of every civilization. Religion begins by offering magical aid to

¹⁰ Cf. the contemporary causation of birth control by urban industrialism, and the gradual acceptance of such control by the Church.

harassed and bewildered men; it culminates by giving to a people that unity of morals and belief which seems so favorable to statesmanship and art; it ends by fighting suicidally in the lost cause of the past. For as knowledge grows or alters continually, it clashes with mythology and theology, which change with geological leisureliness. Priestly control of arts and letters is then felt as a galling shackle or hateful barrier, and intellectual history takes on the character of a "conflict between science and religion." Institutions which were at first in the hands of the clergy, like law and punishment, education and morals, marriage and divorce, tend to escape from ecclesiastical control, and become secular, perhaps profane. The intellectual classes abandon the ancient theology and-after some hesitation-the moral code allied with it; literature and philosophy become anti-derical. The movement of liberation rises to an exuberant worship of reason, and falls to a paralyzing disillusionment with every dogma and every idea. Conduct, deprived of its religious supports, deteriorates into epicurean chaos; and life itself, shorn of consoling faith, becomes a burden alike to conscious poverty and to weary wealth. In the end a society and its religion tend to fall together, like body and soul, in a harmonious death. Meanwhile among the oppressed another myth arises, gives new form to human hope, new courage to human effort, and after centuries of chaos builds another civilization.

CHAPTER V

The Mental Elements of Civilization

I. LETTERS

*Language-Its animal background-Its human origins-Its development
-Its results-Education-Initiation-Writing-Poetry*

IN the beginning was the word, for with it man became man. Without those strange noises called common nouns, thought was limited to individual objects or experiences sensorily-for the most part visually remembered or conceived; presumably it could not think of classes as distinct from individual things, nor of qualities as distinct from objects, nor of objects as distinct from their qualities. Without words as class names one might think of this man, or that man, or that man; one could not think of Man, for the eye sees not Man but only men, not classes but particular things. The beginning of humanity came when some freak or crank, half animal and half man, squatted in a cave or in a tree, cracking his brain to invent the first common noun, the first sound-sign that would signify a *group* of like objects: *house* that would mean all houses, *man* that would mean all men, *light* that would mean every light that ever shone on land or sea. From that moment the mental development of the race opened upon a new and endless road. For words are to thought what tools are to work; the product depends largely on the growth of the tools.

Since all origins are guesses, and *de fontibus non disputandum*, the imagination has free play in picturing the beginnings of speech. Perhaps the first form of language-which may be defined as communication through signs-was the love-call of one animal to another. In this sense the jungle, the woods and the prairie are alive with speech. Cries of warning or of terror, the call of the mother to the brood, the cluck and cackle of euphoric or reproductive ecstasy, the parliament of chatter from tree to tree, indicate the busy preparations made by the animal kingdom for the august speech of man. A wild girl found living among the animals in a forest near Cimions, France, had no other speech than hideous screeches and howls. These living noises of the woods seem meaningless to our provincial ear; we are like the philosophical poodle Riquet, who says of M. Bergeret: "Everything uttered by my voice means something; but from my master's mouth comes much nonsense." Whitman and Craig discovered a strange correlation between the actions and the exclamations of pigeons; Dupont learned to distinguish twelve specific sounds used by fowl and doves, fifteen by dogs, and twenty-two by homed cattle; Gamer found that the apes carried on their endless gossip with at least twenty different sounds, plus a repenory of gestures; and from these modest vocabularies a few steps bring us to the three hundred words that suffice some unpretentious men."

Gesture seems primary, speech secondary, in the earlier transmission of thought; and when speech fails, gesture comes again to the fore. Among the North American Indians, who had countless dialects, married couples were often derived from different tribes, and maintained communication and accord

by gestures rather than speech; one couple known to Lewis Morgan used silent signs for three years. Gesture was so prominent in some Indian languages that the Arapahos, like some modern peoples, could hardly converse in the dark." Perhaps the first human words were interjections, expressions of emotion as among animals; then demonstrative words accompanying gestures of direction; and imitative sounds that came in time to be the names of the objects or actions that they simulated. Even after indefinite millenniums of linguistic changes and complications every language still contains hundreds of imitative *words-roar, rush, lmmur, tremor, giggle, groan, hiss, heave, bum, cackle*, etc¹¹. The Tecuna tribe, of ancient Brazil, had a perfect verb for sneeze: *baitscbu*." Out of such beginnings, *perhaps*, came the root-words of every language. Renan reduced all Hebrew words to five hundred roots, and Skeat nearly all European words to some four hundred stems.¹²

The languages of nature peoples are not necessarily primitive in any sense of simplicity; many of them are simple in vocabulary and structure, but some of them are as complex and wordy as our own, and more highly organized than Chinese.' Nearly all primitive tongues, however, limit themselves to the sensual and particular, and are uniformly poor in general or abstract terms. So the Australian natives had a name for a dog's tail, and another name for a cow's tail; but they had no name for tail in general." The Tasmanians had separate names for specific trees, but no general name for tree; the Choctaw Indians had names for the black oak, the white oak and the red oak, but no name for oak, much less for tree. Doubtless many generations passed before the proper noun ended in the common noun. In many tribes there are no separate words for the color as distinct from the colored object; no words for such abstractions as tone, sex, species, space, spirit, instinct, reason, quantity, hope, fear, matter, consciousness, etc. Such abstract terms seem to grow in a reciprocal relation of cause and effect with the development of thought; they become the tools of subtlety and the symbols of civilization.

Bearing so many gifts to men, words seemed to them a divine boon and a sacred thing; they became the matter of magic formulas, most revered when most meaningless; and they still survive as sacred in mysteries where, e.g., the Word becomes Flesh. They made not only for clearer thinking, but for better social organization; they cemented the generations mentally, by providing a better medium for education and the transmission of knowledge and the arts; they created a new organ of communication, by which one doctrine or belief could mold a people into

¹¹ Such onomatopoeia still remains a refuge in linguistic emergencies. The Englishman eating his first meal in China, and wishing to know the character of the meat he was eating, inquired, with Anglo-Saxon dignity and reserve, "Quack, quack?" To which the Chinaman, shaking his head, answered cheerfully, "Bow-wow."

¹² E.g., *divine* is from Latin *divus*, which is from *deus*, Greek *theos*, Sanskrit *deva*, meaning god; in the Gypsy tongue the word for god, by a strange prank, becomes *devel*. *Historically* goes back to the Sanskrit root *vid*, to know; Greek *oida*, Latin *video* (sec), French *voir* (sec), German *wissen* (know), English *to wit*; plus the suffixes *tor* (as in *author, praetor, rbetor*), *ic, al, and ly* (=like). Again, the Sanskrit root *ar*, to plough, gives the Latin *arare*, Russian *orati*, English *to ear* the land, *arable, art, oar*, and perhaps the word *Aryan-the* ploughers.

homogeneous unity. They opened new roads for the transport and traffic of ideas, and immensely accelerated the tempo, and enlarged the range and content, of life. Has any other invention ever equaled, in power and glory, the common noun?

Next to the enlargement of thought the greatest of these gifts of speech was education. Civilization is an accumulation, a treasure-house of arts and wisdom, manners and morals, from which the individual, in his development, draws nourishment for his mental life; without that periodical reacquisition of the racial heritage by each generation, civilization would die a sudden death. It owes its life to education.

Education had few frills among primitive peoples; to them, as to the animals, education was chiefly the transmission of skills and the training of character; it was a wholesome relation of apprentice to master in the ways of life. This direct and practical tutelage encouraged a rapid growth in the primitive child. In the Omaha tribes the boy of ten had already learned nearly all the arts of his father, and was ready for life; among the Aleuts the boy of ten often set up his own establishment, and sometimes took a wife; in Nigeria children of six or eight would leave the parental house, build a hut, and provide for themselves by hunting and fishing.. Usually this educational process came to an end with the beginning of sexual life; the precocious maturity was followed by an early stagnation. The boy, under such conditions, was adult at twelve and old at twenty-five. This does not mean that the "savage" had the mind of a child; it only means that he had neither the needs nor the opportunities of the modern child; he did not enjoy that long and protected adolescence which allows a more nearly complete transmission of the cultural heritage, and a greater variety and flexibility of adaptive reactions to an artificial and unstable environment.

The environment of the natural man was comparatively permanent; it called not for mental agility but for courage and character. The primitive father put his trust in character, as modern education has put its trust in intellect; he was concerned to make not scholars but men. Hence the initiation rites which, among nature peoples, ordinarily marked the arrival of the youth at maturity and membership in the tribe, were designed to test courage rather than knowledge; their function was to prepare the young for the hardships of war and the responsibilities of marriage, while at the same time they indulged the old in the delights of inflicting pain. Some of these initiation tests are "too terrible and too revolting to be seen or told.". Among the Kaffirs (to take a mild example) the boys who were candidates for maturity were given arduous work by day, and were prevented from sleeping by night, until they dropped from exhaustion; and to make the matter more certain they were scourged "frequently and mercilessly until blood spuned from them." A considerable proportion of the boys died as a result; but this seems to have been looked upon philosophically by the elders, perhaps as an auxiliary anticipation of natural selection. Usually these initiation ceremonies marked the end of adolescence and the preparation for marriage; and the bride insisted that the bridegroom should prove his capacity for suffering. In many tribes of the Congo the initiation rite centered about circumcision; if the youth winced or cried aloud his relatives were thrashed, and his promised bride, who had watched the ceremony carefully, rejected him scornfully, on the ground that she did not want a girl for her husband."

Little or no use was made of writing in primitive education. Nothing surprises the natural man so much as the ability of Europeans to communicate with one another, over great distances, by making black scratches upon a piece of paper.' Many tribes have learned to write by imitating their civilized exploiters; but some, as in northern Africa, have remained letterless despite five thousand years of intermittent contact with literate nations. Simple tribes living for the most part in comparative isolation, and knowing the happiness of having no history, felt little need for writing. Their memories were all the stronger for having no written aids; they learned and retained, and passed on to their children by recitation, what- ever seemed necessary in the way of historical record and cultural trans- mission. It was probably by committing such oral traditions and folk-lore to writing that literature began. Doubtless the invention of writing was met with a long and holy opposition, as something calculated to undermine morals and the race. An Egyptian legend relates that when the god Thoth revealed his discovery of the art of writing to King Thamos, the good King denounced it as an enemy of civilization. "Children and young people," protested the monarch, "who had hitherto been forced to apply themselves diligently to learn and retain whatever was taught them, would cease to apply themselves, and would neglect to exercise their memories.'" Of course we can only guess at the origins of this wonderful toy. Per- haps, as we shall see, it was a by-product of pottery, and began as identify- ing "trade-marks" on vessels of clay. Probably a system of written signs was made necessary by the increase of trade among the tribes, and its first forms were rough and conventional pictures of commercial objects and accounts. As trade connected tribes of diverse languages, some mutually intelligible mode of record and communication became desirable. Presumably the numerals were among the earliest written symbols, usually taking the form of parallel marks representing the fingers; we still call them fingers when we speak of them as digits. Such words as *five*, the German *fiinf* and the Greek *pente* go back to a root meaning hand; so the Roman numerals indicated fingers, "V" represented an expanded hand, and "X" was merely two "V's" connected at their points. Writing was in its beginnings-as it still is in China and Japan-a form of drawing, an art. As men used gestures when they could not use words, so they used pictures to transmit their thoughts across time and space; every word and every letter known to us was once a picture, even as trade-marks and the signs of the zodiac are to this day. The primeval Chinese pictures that preceded writing were called ku-wan- literally, "gesture-pictures." Totem poles were pictograph writing; they were, as Mason suggests, tribal autographs. Some tribes used notched sticks to help the memory or to convey a message; others, like the Algonquin Indians, not only notched the sticks but painted figures upon them, making them into miniature totem poles; or perhaps these poles were notched sticks on a grandiose scale. The Peruvian Indians kept complex records, both of numbers and ideas, by knots and loops made in diversely colored cords; perhaps some light is shed upon the origins of the South American Indians by the fact that a similar custom existed among the natives of the Eastern Archipelago and Polynesia. Lao-tse, calling upon the Chinese to return to the simple life, proposed that they should go back to their primeval use of knotted cords.

More highly developed forms of writing appear sporadically among

nature men. Hieroglyphics have been found on Easter Island, in the South Seas; and on one of the Caroline Islands a script has been discovered which consists of fifty-one syllabic signs, picturing figures and ideas." Tradition tells how the priests and chiefs of Easter Island tried to keep to themselves all knowledge of writing, and how the people assembled annually to hear the tablets read; writing was obviously, in its earlier stages, a mysterious and holy thing, a *bieroglyph* or sacred carving. We cannot be sure that these Polynesian scripts were not derived from some of the historic civilizations. In general, writing is a sign of civilization, the least uncertain of the precarious distinctions between civilized and primitive men.

Literature is at first words rather than letters, despite its name; it arises as clerical chants or magic charms, recited usually by the priests, and transmitted orally from memory to memory. *Carmina*, as the Romans named poetry, meant both verses and *charms*; *ode*, among the Greeks, meant originally a magic spell; so did the English *rune* and *lay*, and the German *Lied*. Rhythm and meter, suggested, perhaps, by the rhythms of nature and bodily life, were apparently developed by magicians or *sbtmians* to preserve, transmit, and enhance the "magic incantations of their verse.". The Greeks attributed the first hexameters to the Delphic priests, who were believed to have invented the meter for use in oracles.' Gradually, out of these sacerdotal origins, the poet, the orator and the historian were differentiated and secularized: the orator as the official lauder of the king or solicitor of the deity; the historian as the recorder of the royal deeds; the poet as the singer of originally sacred chants, the formulator and preserver of heroic legends, and the musician who put his tales to music for the instructions populace and kings. So the Fijians, the Tahitians had official orators and narrators to make addresses on ceremony, and to incite the warriors of the tribe by recounting the deeds of their forefathers and exalting the unequalled glories of the nation's past: how little do some recent historians differ from these! The Somali had professional poets who went from village to village singing songs, like medieval minnesingers and troubadours. Only exceptionally were these poems of love; usually they dealt with physical heroism, or battle, or the relations of parents and children. Here, from the Easter Island tablets, is the lament of a father separated from his daughter by the fortunes of war:

The sail of my daughter,
Never broken by the force of foreign clans; The sail of my daughter,
Unbroken by the conspiracy of Honiti!
Ever victorious in all her fights,
She could not be enticed to drink poisoned waters
In the obsidian glass.
Can my sorrow ever be appeased
While we are divided by the mighty seas?
O my daughter, O my daughter! It is a vrut and watery road
Over which I look toward the horizon, My daughter, O my daughter!

II. SCIENCE

Origins-Mathematics-Astronomy-Medicine-Surgery

In the opinion of Herbert Spencer, that supreme expert in the collection of evidence *post judicium*, science, like letters, began with the priests, originated in astronomic observations, governing religious festivals, and was preserved in the temples and transmitted across the generations as part of the clerical heritage. We cannot say, for here again beginnings elude us, and we may only surmise. Perhaps science, like civilization in general, began with agriculture; geometry, as its name indicates, was the measurement of the soil; and the calculation of crops and seasons, necessitating the observation of the stars and the construction of a calendar, may have generated astronomy. Navigation advanced astronomy, trade developed mathematics, and the industrial arts laid the bases of physics and chemistry.

Counting was probably one of the earliest forms of speech, and in many tribes it still presents a relieving simplicity. The Tasmanians counted up to two: "Parmery, calabawa, cardia"-i.e., "one, two, plenty"; the Guaranis of Brazil adventured further and said: "One, two, three, four, in-numerable." The New Hollanders had no words for *three* or *four*; *three* they called "two-one"; *four* was "two-two." Damara natives would not exchange two sheep for four sticks, but willingly exchanged, twice in succession, one sheep for two sticks. Counting was by the fingers; hence the decimal system. When-apparently after some time-the idea of twelve was reached, the number became a favorite because it was so pleasantly divisible by five of the first six digits; and that duodecimal system was born which obstinately survives in English measurements today: twelve months in a year, twelve pence in a shilling, twelve units in a dozen, twelve dozen in a gross, twelve inches in a foot. Thirteen, on the other hand, refused to be divided, and became disreputable and unlucky forever. Toes added to fingers created the idea of twenty or a score; the use of this unit in reckoning lingers in the French *quatre-vingt* (four twenties) for *eighty*." Other parts of the body served as standards of measurement: a hand for a "span," a thumb for an inch (in French the two words are the same), an elbow for a "cubit," an arm for an "ell," a foot for a foot. At an early date pebbles were added to fingers as an aid in counting; the survival of the *abacus*, and of the "little stone" (*calculus*) concealed in the word *calculate*, reveal to us how small, again, is the gap between the simplest and the latest men. Thoreau longed for this primitive simplicity, and well expressed a universally recurrent mood: "An honest man has hardly need to count more than his ten fingers, or, in extreme cases he may add his toes, and lump the rest. I say, let our affairs be as two or three, and not as a hundred or a thousand; instead of a million count half a dozen, and keep your accounts on your thumb-nail."

The measurement of time by the movements of the heavenly bodies was probably the beginning of astronomy; the very word *measure*, like the word *month* (and perhaps the word *man-the* measurer), goes back apparently to a root denoting the moon... Men measured time by moons long before they counted it by years; the sun, like the father, was a comparatively late discovery; even today Easter is reckoned according to the phases of the moon. The Polynesians had a calendar of thirteen months, regulated by the moon; when their lunar year diverged too flagrantly from the procession of the seasons they dropped a moon, and the balance was restored." But such sane uses of the heavens

were exceptional; astrology antedated-and perhaps will survive-astronomy; simple souls are more interested in telling futures than in telling time. A myriad of superstitions grew up about the influence of the stars upon human character and fate; and many of these superstitions flourish in our own day (Extract from an advertisement in the Town Hall (New York) program of March 5, 1934: "Horoscopes, by -- Astrologer to New York's most distinguished social and professional clientele. Ten dollars an hour."). Perhaps they are not superstitions, but only another kind of error than science.

Natural man formulates no physics, but merely practices it; he cannot plot the path of a projectile, but he can aim an arrow well; he has no chemical symbols, but he knows at a glance which plants are poison and which are food, and uses subtle herbs to heal the ills of the flesh. Perhaps we should employ another gender here, for probably the first doctors were women; not only because they were the natural nurses of the men, nor merely because they made midwifery, rather than venality, the oldest profession, but because their closer connection with the soil gave them a superior knowledge of plants, and enabled them to develop the art of medicine as distinct from the magic-mongering of the priests. From the earliest days to a time yet within our memory, it was the woman who healed. Only when the woman failed did the primitive sick resort to the medicine-man and the *shaman*."

It is astonishing how many cures primitive doctors effected despite their theories of disease.' To these simple people disease seemed to be possession of the body by an alien power or spirit-a conception not essentially different from the germ theory which pervades medicine today. The most popular method of cure was by some magic incantation that would propitiate the evil spirit or drive it away. How perennial this form of therapy is may be seen in the story of the Gadarene swine." Even now epilepsy is regarded by many as a possession; some contemporary religions prescribe forms of exorcism for banishing disease, and prayer is recognized by most living people as an aid to pills and drugs. Perhaps the primitive practice was based, as much as the most modern, on the healing power of suggestion. The tricks of these early doctors were more dramatic than those of their more civilized successors: they tried to scare off the possessing demon by assuming terrifying masks, covering themselves with the skins of animals, shouting, raving, slapping their hands, shaking rattles, and sucking the demon out through a hollow tube; as an old adage put it, "Nature cures the disease while the remedy amuses the patient." The Brazilian Bororos carried the science to a higher stage by having the father take the medicine in order to cure the sick child; almost invariably the child got well...

Along with medicative herbs we find in the vast pharmacopoeia of primitive man an assortment of soporific drugs calculated to ease pain or to facilitate operations. Poisons like curare (used so frequently on the tips of arrows), and drugs like hemp, opium and eucalyptus are older than history; one of our most popular anesthetics goes back to the Peruvian use of coca for this purpose. Cartier tells how the Iroquois cured scurvy with the bark and leaves of the hemlock spruce... Primitive surgery knew a variety of operations and instruments. Childbirth was well managed; fractures and wounds were ably set and dressed... By means of obsidian knives, or sharpened flints, or fishes' teeth, blood was let, abscesses were drained, and tissues were scarified. Trephining of the skull was practiced by

primitive medicine-men from the ancient Peruvian Indians to the modern Melanesians; the latter averaged nine successes out of every ten operations, while in 1786 the same operation was invariably fatal at the hotel Dieu in Paris...

We smile at primitive ignorance while we submit anxiously to the expensive therapeutics of our own day. As Dr. Oliver Wendell Holmes wrote, after a lifetime of healing:

There is nothing men will not do, there is nothing they have not done, to recover their health and save their lives. They have submitted to be half-drowned in water and half-choked with gases, to be buried up to their chins in earth, to be seared with hot irons like galley-slaves, to be crimped with knives like codfish, to have needles thrust into their flesh, and bonfires kindled on their skin, to swallow all sorts of abominations, and to pay for all this as if to be singed and scalded were a costly privilege, as if blisters were a blessing and leeches a luxury.'"

ART

The meaning of beauty-of art-The primitive sense of beauty- The painting of the body-Cosmetics-Tattooing-Scarification- Clothing- Ornaments- Pottery -Painting- Sculpture – Architecture – The dance – Music – Summary of the primitive preparation for civilization

After fifty thousand years of an men still dispute as to its sources in instinct and in history. What is beauty?-why do we admire it?-why do we endeavor to create it? Since this is no place for psychological discourse we shall answer, briefly and precariously, that beauty is any quality by which an object or a form pleases a beholder. Primarily and originally the object does not please the beholder because it is beautiful, but rather he calls it beautiful because it pleases him. Any object that satisfies desire will seem beautiful: food is beautiful-Thais is not beautiful-to a starving man. The pleasing object may as like as not be the beholder himself; in our secret heans no other form is quite so fair as ours, and art begins with the adornment of one's own exquisite body. Or the pleasing object may be the desired mate; and then the esthetic-beauty-feeling-sense takes on the intensity and creativeness of sex, and spreads the aura of beauty to everything that concerns the beloved one-to all forms that resemble her, all colors that adorn her, please her or speak of her, all ornaments and garments that become her, all shapes and motions that recall her symmetry and grace. Or the pleasing form may be a desired male; and out of the attraction that here draws frailty to worship strength comes that sense of sublimity-satisfaction in the presence of power-which creates the loftiest an of all. Finally nature herself-with our cooperation -may become both sublime and beautiful; not only because it simulates and suggests all the tenderness of women and all the strength of men, but because we project into it our own feelings and fortunes, our love of others and of ourselves-relishing in it the scenes of our youth, enjoying its quiet solitude as an escape from the storm of life, living with it through its almost human seasons of green youth, hot maturity, "mellow fruitfulness" and cold decay, and recognizing it vaguely as the mother that lent us life and will receive us in our death.

An is the creation of beauty; it is the expression of thought or feeling in a form that seems beautiful or sublime, and therefore arouses in us some reverberation of that primordial delight which woman gives to man, or man to woman. The thought may be any capture of life's significance, the feeling may

be any arousal or release of life's tensions. The form may satisfy us through rhythm, which falls in pleasantly with the alternations of our breath, the pulsation of our blood, and the majestic oscillations of winter and summer, ebb and flow, night and day; or the form may please us through symmetry, which is a static rhythm, standing for strength and recalling to us the ordered proportions of plants and animals, of women and men; or it may please us through color, which brightens the spirit or intensifies life; or finally the form may please us through veracity-because its lucid and transparent imitation of nature or reality catches some monaloveliness of plant or animal, or some transient meaning of circumstance, and holds it still for our lingering enjoyment or leisurely under-standing. From these many sources come those noble superfluities of life -song and dance, music and drama, pottery and painting, sculpture and architecture, literature and philosophy. For what is philosophy but an -one more attempt to give "significant form" to the chaos of experience?

If the sense of beauty is not strong in primitive society it may be because the lack of delay between sexual desire and fulfilment gives no time for that imaginative enhancement of the object which makes so much of the object's beauty. Primitive man seldom thinks of selecting women because of what we should call their beauty; he thinks rather of their usefulness, and never dreams of rejecting a strong-armed bride because of her ugliness. The Indian chief, being asked which of his wives was loveliest, apologized for never having thought of the matter. "Their faces," he said, with the mature wisdom of a Franklin, "might be more or less handsome, but in other respects women are all the same." Where a sense of beauty is present in primitive man it sometimes eludes us by being so different from our own. "All Negro races that I know," says Reichard, "account a woman beautiful who is not constricted at the waist, and when the body from the arm-pits to the hips is the same breadth-'like a ladder,' says the Coast Negro." Elephantine ears and an overhanging stomach are feminine charms to some African males; and throughout Africa it is the fat woman who is accounted loveliest. In Nigeria, says Mungo Park, "corpulence and beauty seem to be terms nearly synonymous. A woman of even moderate pretensions must be one who cannot walk without a slave under each arm to support her; and a perfect beauty is a load for a camel." "Most savages," says Briffault, "have a preference for what we should regard as one of the most unsightly features in a woman's form, namely, long, hanging breasts." "It is well known," says Darwin, "that with many Hottentot women the posterior part of the body projects in a wonderful manner; and Sir Andrew Smith is certain that this peculiarity is greatly admired by the men. He once saw a woman who was considered a beauty, and she was so immensely developed behind that when seated on level ground she could not rise, and had to push herself along until she came to a slope... According to Burton the Somali men are said to choose their wives by ranging them in a line, and by picking her out who projects furthest *a tergo*. Nothing can be more hateful to a Negro than the opposite form."

Indeed it is highly probable that the natural male thinks of beauty in terms of himself rather than in terms of woman; art begins at home. Primitive men equaled modern men in vanity, incredible as this will seem to women. Among simple peoples, as among animals, it is the male rather than the female that puts on ornament and mutilates his body for beauty's sake. In Australia,

says Bonwick, "adornments are almost entirely monopolized by men"; so too in Melanesia, New Guinea, New Caledonia, New Britain, New Hanover, and among the North American Indians.' In some tribes more time is given to the adornment of the body than to any other business of the day... Apparently the first form of art is the artificial coloring of the body-sometimes to attract women, sometimes to frighten foes. The Australian native, like the latest American belle, always carried with him a provision of white, red, and yellow paint for touching up his beauty now and then; and when the supply threatened to run out he undertook expeditions of some distance and danger to renew it. On ordinary days he contented himself with a few spots of color on his cheeks, his shoulders and his breast; but on festive occasions he felt shamefully nude unless his entire body was painted...

In some tribes the men reserved to themselves the right to paint the body; in others the married women were forbidden to paint their necks.' But women were not long in acquiring the oldest of the arts-cosmetics. When Captam Cook dallied in New Zealand he noticed that his sailors, when they returned from their adventures on shore, had artificially red or yellow noses; the paint of the native Helens had stuck to them." The Fellatah ladies of Central Africa spent several hours a day over their toilette: they made their fingers and toes purple by keeping them wrapped all night in henna leaves; they stained their teeth alternately with blue, yellow, and purple dyes; they colored their hair with indigo, and penciled their eyelids with sulphuret of antimony... Every Bongo lady carried in her dressing-case tweezers for pulling out eyelashes and eyebrows, lancet-shaped hair-pins, rings and bells, buttons and clasps."

The primitive soul, like the Periclean Greek, fretted over the transitoriness of painting, and invented tattooing, scarification and clothing as more permanent adornments. The women as well as the men, in many tribes, submitted to the coloring needle, and bore without flinching even the tattooing of their lips. In Greenland the mothers tattooed their daughters early, the sooner to get them married off." Most often, however, tattooing itself was considered insufficiently visible or impressive, and a number of tribes on every continent produced deep scars on their flesh to make themselves lovelier to their fellows, or more discouraging to their enemies. As Theophile Gautier put it, "having no clothes to embroider, they embroidered their skins.'" Flints or mussel shells cut the flesh, and often a ball of earth was placed within the wound to enlarge the scar. The Torres Straits natives wore huge scars like epaulets; the Abcokuta cut themselves to produce scars imitative of lizards, alligators or tortoises.'" "There is," says Georg, "no part of the body that has not been perfected, decorated, disfigured, painted, bleached, tattooed, reformed, stretched or squeezed, out of vanity or desire for ornament." The Botocudos derived their name from a plug (*botoque*) which they inserted into the lower lip and the ears in the eighth year of life, and repeatedly replaced with a larger plug until the opening was as much as four inches in diameter.'" Hottentot women trained the *labia minora* to assume enormous lengths, so producing at last the "Hottentot apron" so greatly admired by their men. Ear-rings and nose-rings were *de rigueur*; the natives of Gippsland believed that one who died without a nose-ring would suffer horrible torments in the next life.

It is all very barbarous, says the modern lady, as she bores her ears for rings, paints her lips and her cheeks, tweezes her eyebrows, reforms her eyelashes,

powders her face, her neck and her arms, and compresses her feet. The tattooed sailor speaks with superior sympathy of the "savages" he has known; and the Continental student, horrified by primitive mutilations, sports his honorific scars.

Clothing was apparently, in its origin, a form of ornament, a sexual deterrent or charm rather than an article of use against cold or shame.⁶

The Cimbri were in the habit of tobogganing naked over the snow." When Darwin, pitying the nakedness of the Fuegians, gave one of them a red cloth as a protection against the cold, the native tore it into strips, which he and his companions then used as ornaments; as Cook had said of them, timelessly, they were "content to be naked, but ambitious to be fine.".. In like manner the ladies of the Orinoco cut into shreds the materials given them by the Jesuit Fathers for clothing; they wore the ribbons so made around their necks, but insisted that "they would be ashamed to wear clothing."⁶ An old author describes the Brazilian natives as usually naked, and adds: "Now already some do wear apparell, but esteem it so little that they wear it rather for fashion than for honesties sake, and because they are commanded to wear it; . . . as is well scene by some that some- times come abroad with certain garments no further than the navell, with- out any other thing, or others only a cap on their heads, and leave the other garments at home.".. When clothing became something more than an adornment it served partly to indicate the married status of a loyal wife, partly to accentuate the form and beauty of woman. For the most part primitive women asked of clothing precisely what later women have asked-not that it should quite cover their nakedness, but that it should enhance or suggest their charms. Everything changes, except woman and man.

From the beginning both sexes preferred ornaments to clothing. Primitive trade seldom deals in necessities; it is usually confined to articles of adornment or play... Jewelry is one of the most ancient elements of civilization; in tombs twenty thousand years old, shells and teeth have been found strung into necklaces.⁶ From simple beginnings such embellishments soon reached impressive proportions, and played a lofty role in life. The Galla women wore rings to the weight of six pounds, and some Dinka women carried half a hundredweight of decoration. One African belle wore copper rings which became hot under the sun, so that she had to employ an attendant to shade or fan her. The Queen of the Wabunias on the Congo wore a brass collar weighing twenty pounds; she had to lie down every now and then to rest. Poor women who were so unfortunate as to have only light jewelry imitated carefully the steps of those who carried great burdens of bedizenment.

The first source of art, then, is akin to the display of colors and plumage on the male animal in mating time; it lies in the desire to adorn and beautify the body. And just as self-love and mate-love, overflowing, pour out their surplus of affection upon nature, so the impulse to beautify passes from the personal to the external world. The soul seeks to express its feeling in objective ways, through color and form; art really begins when men undertake to beautify things. Perhaps its first external medium was pottery. The potter's wheel, like writing and the state, belongs to the historic civilizations; but even without it primitive men-or rather women-lifted this ancient industry to an art, and achieved merely with clay, water and deft fingers an astonishing symmetry of form; witness the pottery fashioned by the Baronga of South Africa," or by the Pueblo Indians."

When the potter applied colored designs to the surface of the vessel he had

formed, he was creating the art of painting. In primitive hands painting is not yet an independent art; it exists as an adjunct to pottery and statuary. Nature men made colors out of clay, and the Andamanese made oil colors by mixing ochre with oils or fats. Such colors were used to ornament weapons, implements, vases, clothing, and buildings. Many hunting tribes of Africa and Oceania painted upon the walls of their caves or upon neighboring rocks vivid representations of the animals that they sought in the chase...

Sculpture, like painting, probably owed its origin to pottery: the potter found that he could mold not only articles of use, but imitative figures that might serve as magic amulets, and then as things of beauty in themselves. The Eskimos carved caribou antlers and walrus ivory into figurines of animals and men... Again, primitive man sought to mark his hut, or a totem-pole, or a grave with some image that would indicate the object worshiped, or the person deceased; at first he carved merely a face upon a post, then a head, then the whole post; and through this filial marking of graves sculpture became an art.⁶⁴ So the ancient dwellers on Easter Island topped with enormous monolithic statues the vaults of their dead; scores of such statues, many of them twenty feet high, have been found there; some, now prostrate in ruins, were apparently sixty feet tall.

How did architecture begin? We can hardly apply so magnificent a term to the construction of the primitive hut; for architecture is not mere building, but beautiful building. It began when for the first time a man or a woman thought of a dwelling in terms of appearance as well as of use. Probably this effort to give beauty or sublimity to a structure was directed first to graves rather than to homes; while the commemorative pillar developed into statuary, the tomb grew into a temple. For to primitive thought the dead were more important and powerful than the living; and, besides, the dead could remain settled in one place, while the living wandered too often to warrant their raising permanent homes.

Even in early days, and probably long before he thought of carving objects or building tombs, man found pleasure in rhythm, and began to develop the crying and warbling, the prancing and preening, of the animal into song and dance. Perhaps, like the animal, he sang before he learned to talk, and danced as early as he sang. Indeed no art so characterized or expressed primitive man as the dance. He developed it from primordial simplicity to a complexity unrivaled in civilization and varied it into a thousand forms. The great festivals of the tribes were celebrated chiefly with communal and individual dancing; great wars were opened with martial steps and chants; the great ceremonies of religion were a mingling of song, drama and dance. What seems to us now to be forms of play were probably serious matters to early men; they danced not merely to express themselves, but to offer suggestions to nature or the gods; for example, the periodic incitation to abundant reproduction was accomplished chiefly through the hypnotism of the dance. Spencer derived the dance from the ritual of welcoming a victorious chief home from the wars; Freud derived it from the natural expression of sensual desire, and the group technique of erotic stimulation; if one should assert, with similar narrowness, that the dance was born of sacred rites and mummeries, and then merge the three theories into one, there might result as definite a conception of the origin of the dance as can be attained by us today.

From the dance, we may believe, came instrumental music and the drama. The making of such music appears to arise out of a desire to mark and

accentuate with sound the rhythm of the dance, and to intensify with shrill or rhythmic notes the excitement necessary to patriotism or procreation. The instruments were limited in range and accomplishment, but almost endless in variety: native ingenuity exhausted itself in fashioning horns, trumpets, gongs, tamtams, clappers, rattles, castanets, flutes and drums from horns, skins, shells, ivory, brass, copper, bamboo and wood; and it ornamented them with elaborate carving and coloring. The taut string of the bow became the origin of a hundred instruments from the primitive lyre to the Stradivarius violin and the modern pianoforte. Professional singers, like professional dancers, arose among the tribes; and vague scales, predominantly minor in tone, were developed.

With music, song and dance combined, the "savage" created for us the drama and the opera. For the primitive dance was frequently devoted to mimicry; it imitated, most simply, the movements of animals and men, and passed to the mimetic performance of actions and events. So some Australian tribes staged a sexual dance around a pit ornamented with shrubbery to represent the vulva, and, after ecstatic and erotic gestures and prancing, cast their spears symbolically into the pit. The northwestern tribes of the same island played a drama of death and resurrection differing only in simplicity from the medieval mystery and modern Passion plays: the dancers slowly sank to the ground, hid their heads under the boughs they carried, and simulated death; then, at a sign from their leader, they rose abruptly in a wild triumphal chant and dance announcing the resurrection of the soul.²⁴ In like manner a thousand forms of pantomime described events significant to the history of the tribe, or actions important in the individual life. When rhythm disappeared from these performances the dance passed into the drama, and one of the greatest of art-forms was born.

In these ways precivilized men created the forms and bases of civilization. Looking backward upon this brief survey of primitive culture, we find every element of civilization except writing and the state. All the modes of economic life are invented for us here: hunting and fishing, herding and tillage, transport and building, industry and commerce and finance. All the simpler structures of political life are organized: the clan, the family, the village community, and the tribe; freedom and order—those hostile foci around which civilization revolves—find their first adjustment and reconciliation; law and justice begin. The fundamentals of morals are established: the training of children, the regulation of the sexes, the inculcation of honor and decency, of manners and loyalty. The bases of religion are laid, and its hopes and terrors are applied to the encouragement of morals and the strengthening of the group. Speech is developed into complex languages, medicine and surgery appear, and modest beginnings are made in science, literature and art. All in all it is a picture of astonishing creation, of form rising out of chaos, of one road after another being opened from the animal to the sage. Without these "savages," and their hundred thousand years of experiment and groping, civilization could not have been. We owe almost everything to them—as a fortunate, and possibly degenerate, youth inherits the means to culture, security and ease through the long toil of an unlettered ancestry.

CHAPTER VI

The Prehistoric Beginnings of Civilization

I. PALEOLITHIC CULTURE

The purpose of prehistory-The romances of archeology

BUT we have spoken loosely; these primitive cultures that we have sketched as a means of studying the elements of civilization were not necessarily the ancestors of our own; for all that we know they may be the degenerate remnants of higher cultures that decayed when human leadership moved in the wake of the receding ice from the tropics to the north temperate zone. We have tried to understand how civilization in general arises and takes form; we have still to trace the prehistoric (This word will be used as applying to all ages before historical records) origins of our own particular civilization. We wish now to inquire briefly-for this is a field that only borders upon our purpose-by what steps man, before history, prepared for the civilizations of history: how the man of the jungle or the cave became an Egyptian architect, a Babylonian astronomer, a Hebrew prophet, a Persian governor, a Greek poet, a Roman engineer, a Hindu saint, a Japanese artist, and a Chinese sage. We must pass from anthropology through archeology to history.

All over the earth seekers are digging into the earth: some for gold, some for silver, some for iron, some for coal; many of them for knowledge. What strange busyness of men exhuming paleolithic tools from the banks of the Somme, studying with strained necks the vivid paintings on the ceilings of prehistoric caves, unearthing antique skulls at Chou Kou Tien, revealing the buried cities of Mohenjo-daro or Yucatan, carrying debris in basket-caravans out of curse-ridden Egyptian tombs, lifting out of the dust the palaces of Minos and Priam, uncovering the ruins of Persepolis, burrowing into the soil of Africa for some remnant of Carthage, recapturing from the jungle the majestic temples of Angkor! In 1839 Jacques Boucher de Perthes found the first Stone Age flints at Abbeville, in France; for nine years the world laughed at him as a dupe. In 1871 Schliemann, with his own money, almost with his own hands, unearthed the youngest of the many cities of Troy; but all the world smiled incredulously. Never has any century been so interested in history as that which followed the voyage of young Champollion with young Napoleon to Egypt (1796); Napoleon returned empty-handed, but Champollion came back with all Egypt, past and current, in his grasp. Every generation since has discovered new civilizations or cultures, and has pushed farther and farther back the frontier of man's knowledge of his development. There are not many things finer in our

murderous species than this noble curiosity, this rest- less and reckless passion to understand.

<i>Geological</i>	<i>Divisional</i>	<i>Hypothetical</i>	
<i>Period</i>	<i>Epoch</i>	<i>Age B.C.</i>	
	<i>Stag^{ty}</i>		
Quaternary	Pleistocene ("Most Recent")	1,000,000	
		1st Inter	475,000
		2nd Inte	300,000
			125,000
		3rd Inter	100,000
		4th Ice-A	75,000
			40,000
		Postglac	25,000
			20,000
			16,000
	10,000		
	7,000		
	5,000		
	Holocene ("Wholly R	4,500	

1. Men of the Old Stone Age

The geological background-Paleolithic types

Immense volumes have been written to expound our knowledge, and conceal our ignorance, of primitive man. We leave to other imaginative sciences the task of describing the them of the Old and the New Stone Age; our concern is to trace the contributions of these "paleolithic" and "neolithic" cultures to our contemporary life.

The picture we must form as background to the story is of an earth considerably different from that which tolerates us transiently today: an earth pre

umably shivering with the intermittent glaciations that made our now temperate zones arctic for thousands of years, and piled up masses of rock like the Himalayas, the Alps and the Pyrenees before the plough of the advancing ice.¹³ If we accept the precarious theories of contemporary science, the creature who became man by learning to speak was one of the adaptable species that survived from those frozen centuries. In the Interglacial Stages, while the ice was retreating (and, for all we know, long before that), this strange organism discovered fire, developed the art of fashioning stone and bone into weapons and tools, and thereby paved the way to civilization.

Various remains have been found which—subject to later correction—are attributed to this prehistoric man. In 1929 a young Chinese paleontologist, W. C. Pei, discovered in a cave at Chou Kou Tien, some thirty-seven miles from Peiping, a skull adjudged to be human by such experts as the Abbe Breuil and G. Elliot Smith. Near the skull were traces of fire, and stones obviously worked into tools; but mingled with these signs of human agency were the bones of animals ascribed by common consent to the Early Pleistocene Epoch, a million years ago. This Peking skull is by common opinion the oldest human fossil known to us; and the tools found with it are the first human artefacts in history. At Piltdown, in Sussex, England, Dawson and Woodward found in 1911 some possibly human fragments now known as "Piltdown Man," or *Eoanthropus* (Dawn Man); the dates assigned to it range spaciouly from 1,000,000 to 125,000 B.C. Similar uncertainties attach to the skull and thigh-bones found in Java in 1891, and the jaw-bone found near Heidelberg in 1907. The earliest unmistakably human fossils were discovered at Neanderthal, near Dusseldorf, Germany, in 1857; they date apparently from 40,000 B.C., and do resemble human remains unearthed in Belgium, France and Spain, and even on the shores of the Sea of Galilee, that a whole race of "Neanderthal Men" has been pictured as possessing Europe some forty millenniums before our era. They were short, but they had a cranial capacity of 1600 cubic centimeters—which is 200 more than ours.'

These ancient inhabitants of Europe seem to have been displaced, some 20,000 bc, by a new race, named Cro-Magnon, from the discovery of its relics (1868) in a grotto of that name in the Dordogne region of southern France. Abundant remains of like type and age have been exhumed at various points in France, Switzerland, Germany and Wales. They indicate a people of magnificent vigor and stature, ranging from five feet ten inches to six feet four inches in height, and having a skull capacity of 1590 to 1715 cubic centimeters. Like the Neanderthals, Cro-Magnon men are known to us as "cave-men," because their remains are found in caves; but there is no proof that these were their sole dwelling-place; it may be again but a jest of time that only those of them who lived in caves, or died in them, have transmitted

¹³ Current geological theory places the First Ice Age about 500,000 B.C.; the First Interglacial Stage about 475,000 to 400,000 B.C.; the Second Ice Age about 400,000 B.C.; the Second Interglacial Stage about 375,000 to 175,000 B.C.; the Third Ice Age about 175,000 B.C.; the Third Interglacial Stage about 150,000 to 50,000 B.C.; the Fourth (and latest) Ice Age about 50,000 to 25,000 B.C.* We are now in the Postglacial Stage, whose date of termination has not been accurately calculated. These and other details have been arranged more visibly in the table at the head of this chapter.

their bones to archeologists. According to present theory this splendid race came from central Asia through Africa into Europe by land-bridges presumed to have then connected Africa with Italy and Spain. The distribution of their fossils suggests that they fought for many decades, perhaps centuries, a war with the Neanderthals for the possession of Europe; so old is the conflict between Germany and France. At all events, Neanderthal Man disappeared; Cro-Magnon Man survived, became the chief progenitor of the modern western European, and laid the bases of that civilization which we inherit today.

The cultural remains of these and other European types of the Old Stone Age have been classified into seven main groups, according to the location of the earliest or principal finds in France. All are characterized by the use of unpolished stone implements. The first three took form in the precarious interval between the third and fourth glaciations.

I. The *Pre-Chellean Culture* or Industry, dating some 125,000 B.C.: most of the flints found in this low layer give little evidence of fashioning, and appear to have been used (if at all) as nature provided them; but the presence of many stones of a shape to fit the fist, and in some degree flaked and pointed, gives to Pre-Chellean man the presumptive honor of having made the first known tool of European man—the *coup-de-poing*, or "blow-of-the-fist" stone.

II. The *Chellean Culture*, ca. 100,000 B.C., improved this tool by roughly flaking it on both sides, pointing it into the shape of an almond, and fitting it better to the hand.

III. The *Acheulean Culture*, about 75,000 B.C., left an abundance of remains in Europe, Greenland, the United States, Canada, Mexico, Africa, the Near East, India, and China; it not only brought the *coup-de-poing* to greater symmetry and point, but it produced a vast variety of special tools—hammers, anvils, scrapers, planes, arrow-heads, spear-heads, and knives; already one sees a picture of busy human industry.

IV. The *Mousterian Culture* is found on all continents, in especial association with the remains of Neanderthal Man, about 40,000 B.C. Among these flints the *coup-de-poing* is comparatively rare, as something already ancient and superseded. The implements were formed from a large single flake, lighter, sharper and shapelier than before, and by skilful hands with a long-established tradition of artisanship. Higher in the Pleistocene strata of southern France appear the remains of

V. The *Aurignacian Culture*, ca. 25,000 B.C., the first of the postglacial industries, and the first known culture of Cro-Magnon Man. Bone tools—pins, anvils, polishers, etc.—were now added to those of stone; and art appeared in the form of crude engravings on the rocks, or simple figurines in high relief, mostly of nude women.' At a higher stage of Cro-Magnon development

VI. The *Solutrean Culture* appears ca. 20,000 B.C., in France, Spain, Czechoslovakia and Poland: points, planes, drills, saws, javelins and spears were added to the tools and weapons of Aurignacian days; slim, sharp needles were made of bone, many implements were carved out of reindeer horn, and the reindeer's antlers were engraved occasionally with animal figures appreciably superior to Aurignacian art. Finally, at the peak of Cro-Magnon growth,

VII. The *Magdalenian Culture* appears throughout Europe about 16,000 B.C.; in industry it was characterized by a large assortment of delicate utensils in ivory, bone and horn, culminating in humble but perfect needles and pins; in art it was the age of the Altamira drawings, the most perfect and subtle accomplishment of Cro-Magnon Man.

Through these cultures of the Old Stone Age prehistoric man laid the bases of those handicrafts which were to remain part of the European heritage until the Industrial Revolution. Their transmission to the classic and modern civilizations was made easier by the wide spread of Paleolithic industries. The skull and cave-painting found in Rhodesia in 1911, the flints discovered in Egypt by De Morgan in 1896, the Paleolithic finds of Seton-Karr in Somaliland, the Old Stone Age deposits in the basin of the Fayum (An oasis west of the Middle Nile), and the Still Bay Culture of South Africa indicate that the Dark Continent went through approximately the same prehistoric periods of development in the art of flaking stone as those which we have outlined in Europe;" perhaps, indeed, the quasi-Aurignacian remains in Tunis and Algiers strengthen the hypothesis of an African origin or stopping-point for the Cro-Magnon race, and therefore for European man. Paleolithic implements have been dug up in Syria, India, China, Siberia, and other sections of Asia;" Andrews and his Jesuit predecessors came upon them in Mongolian Neanderthal skeletons and Mousterian-Aurignacian flints have been exhumed in great abundance in Palestine; and we have seen how the oldest known human remains and implements have lately been unearthed near Peiping. Bone tools have been discovered in Nebraska which some patriotic authorities would place at 500,000 BC; arrow-heads have been found in Oklahoma and New Mexico which their finders assure us were made in 350,000 B.C. So vast was the bridge by which pre-historic transmitted the foundations of civilization to historic man.

2. Arts of the Old Stone Age Tools-Fire-Painting-Sculpture

If now we sum up the implements fashioned by paleolithic man we shall gain a clearer idea of his life than by giving loose rein to our fancy. It was natural that a stone in the fist should be the first tool; many an animal could have taught that to man. So the *coup-de-poing-a* rock sharp at one end, round at the other to fit the palm of the hand-became for primeval man hammer, axe, chisel, scraper, knife and saw; even to this day the word *hammer* means, etymologically, a stone." Gradually these specific tools were differentiated out of the one homogeneous form: holes were bored to attach a handle; teeth were inserted to make a saw, branches were tipped with the *coup-de-poing* to make a pick, an arrow or a spear. The scraper-stone that had the shape of a shell became a shovel or a hoe; the rough-surfaced stone became a file; the stone in a sling became a weapon of war that would survive even classical antiquity. Given bone, wood and ivory as well as stone, and paleolithic man made himself a varied assortment of weapons and tools: polishers, mortars, axes, planes, scrapers, drills, lamps, knives, chisels, choppers, lances, anvils, etchers, daggers, fish-hooks, harpoons, wedges, awls, pins, and doubtless many more." Every day he stumbled upon new knowledge, and sometimes he had the wit to develop his chance discoveries into purposeful inventions.

But his great achievement was fire. Darwin has pointed out how the hot lava of volcanoes might have taught men the art of fire; according to

Eschylus, Prometheus established it by igniting a narthex stalk in the burning crater of a volcano on the isle of Lemnos." Among Neanderthal remains we find bits of charcoal and charred bones; man-made fire, then, is at least 40,000 years old. Cro-Magnon man ground stone bowls to hold the grease that he burned to give him light: the lamp, therefore, is also of considerable age. Presumably it was fire that enabled man meet the threat of cold from the advancing ice; fire that left him free to sleep on the earth at night, since animals dreaded the marvel as much as primitive men worshiped it; fire that conquered the dark and began that lessening of fear which is one of the golden threads in the not quite golden web of history; fire that created the old and honorable art of cooking, extending the diet of man to a thousand foods inedible before; fire that led at last to the fusing of metals, and the only real advance in technology from Cro-Magnon days to the Industrial Revolution."

Strange to relate-and as if to illustrate Gautier's lines on robust art outlasting emperors and states-our clearest relics of paleolithic man are fragments of his art. Sixty years ago Senor Marcelino de Sautuola came up- on a large cave on his estate at Altamira, in northern Spain. For thousands of years the entrance had been hermetically sealed by fallen rocks naturally cemented with stalagmite deposits. Blasts for new construction accident- ally opened the entrance. Three years later Sautuola explored the cave, and noticed some curious markings on the walls. One day his little daughter accompanied him. Not compelled, like her father, to stoop as she walked through the cave, she could look up and observe the ceiling. There she saw, in vague outline, the painting of a great bison, magnificently colored and drawn. Many other drawings were found on closer examination of the ceiling and the walls. When, in 1880, Sautuola published his report on these observations, archeologists greeted him with genial scepticism. Some did him the honor of going to inspect the drawings, only to pronounce them the forgery of a hoaxer. For thirty years this reasonable incredulity persisted. Then the discovery of other drawings in caves generally conceded to be prehistoric (from their contents of unpolished flint tools, and polished ivory and bone) confirmed Sautuola's judgment; but Sautuola now was dead. Geologists came to Altamira and testified, with the unanimity of hindsight, that the stalagmite coating on many of the drawings was a paleolithic deposit." General opinion now places these Altamira drawings-and the greater portion of extant pre- historic art-in the Magdalenian culture, some 16,000 B.C." Paintings slight- ly later in time, but still of the Old Stone Age, have been found in many caves of France (Combarelles, Les Eyzies, Font de Gawne, etc.).

Most often the subjects of these drawings are animals-reindeers, mammoths, horses, boars, bears, etc.; these, presumably, were dietetic luxuries, and therefore favorite objects of the chase. Sometimes the animals are transfixed with arrows; these, in the view of Frazer and Reinach, were intended as magic images that would bring the animal under the power, and into the stomach, of the artist or the hunter... Conceivably they were just plain art, drawn with the pure joy of esthetic creation; the crudest representation should have sufficed the purposes of magic, whereas these paintings are often of such delicacy, power and skill as to suggest the un- happy thought that an, in this field at least, has not advanced much in the long course of human history. Here is life, action, nobility, conveyed overwhelmingly with one brave line or two; here a single stroke (or is it that the others have faded?) creates a living,

charging beast. Will Leonardo's *Last Supper*, or El Greco's *Assumption*, bear up as well as these Cro-Magnon paintings after twenty thousand years?

Painting is a sophisticated art, presuming many centuries of mental and technical development. If we may accept current theory (which it is always a perilous thing to do), painting developed from statuary, by a passage from carving in the round to bas-relief and thence to mere outline and coloring; painting is sculpture minus a dimension. The intermediate prehistoric art is well represented by an astonishingly vivid bas-relief of an archer (or a spear-man) on the Aurignacian cliffs at Laussel in France.⁶⁴ In a cave in Ariege, France, Louis Begoucn discovered, among other Magdalenian relics, several ornamental handles carved out of reindeer antlers; one of these is of mature and excellent workmanship, as if the art had already generations of tradition and development behind it. Throughout the prehistoric Mediterranean- Egypt, Crete, Italy, France and Spain-countless figures of fat little women are found, which indicate either a worship of motherhood or an African conception of beauty. Stone statues of a wild horse, a reindeer and a mammoth have been unearthed in Czechoslovakia, among remains uncertainly ascribed to 30,000 BC.

The whole interpretation of history as progress falters when we consider that these statues, bas-reliefs and paintings, numerous though they are, may be but an infinitesimal fraction of the art that expressed or adorned the life of primeval man. What remains is found in caves, where the elements were in some measure kept at bay; it does not follow that pre-historic men were artists only when they were in caves. They may have carved as sedulously and ubiquitously as the Japanese, and may have fashioned statuary as abundantly as the Greeks; they may have painted not only the rocks in their caverns, but textiles, wood, everything-not excepting themselves. They may have created masterpieces far superior to the fragments that survive. In one grotto a tube was discovered, made from the bones of a reindeer, and filled with pigment; in another a stone palette was picked up still thick with red ochre paint despite the transit of two hundred centuries... Apparently the arts were highly developed and widely practiced eighteen thousand years ago. Perhaps there was a class of professional artists among paleolithic men; perhaps there were Bohemians starving in the less respectable caves, denouncing the commercial bourgeoisie, plotting the death of academies, and forging antiques.

II. NEOLITHIC CULTURE

The Kitchen-Middens-The Lake-Dwellers-The coming of agriculture-The taming of animals-Technology-Neolithic weaving-pottery-building-transport-religion-science – Summary of the prehistoric preparation for civilization

At various times in the last one hundred years great heaps of seemingly prehistoric refuse have been found, in France, Sardinia, Portugal, Brazil, Japan and Manchuria, but above all in Denmark, where they received that queer name of Kitchen-Middens (*Kjokken-moddinger*) by which such ancient messes are now generally known. These rubbish heaps are composed of shells, especially of oysters, mussels and periwinkles; of the bones of various land and marine animals; of tools and weapons of horn, bone and unpolished stone; and of mineral remains like charcoal, ashes and broken

pottery. These unprepossessing relics are apparently signs of a culture formed about the eighth millennium before Christ—later than the true paleolithic, and yet not properly neolithic, because not yet arrived at the use of polished stone. We know hardly anything of the men who left these remains, except that they had a certain catholic taste. Along with the slightly older culture of the Mas- d'Azil, in France, the Middens represent a "mesolithic" (middle-stone) or transition period between the paleolithic and the neolithic age.

In the year 1854, the winter being unusually dry, the level of the Swiss lakes sank, and revealed another epoch in prehistory. At some two hundred localities on these lakes piles were found which had stood in place under the water for from thirty to seventy centuries. The piles were so arranged as to indicate that small villages had been built upon them, perhaps for isolation or defense; each was connected with the land only by a narrow bridge, whose foundations, in some cases, were still in place; here and there even the framework of the houses had survived the patient play of the waters¹⁴. Amid these ruins were tools of bone and *polished* stone which became for archeologists the distinguishing mark of the New Stone Age that flourished some 10,000 B.C. in Asia, and some 5000 BC. in Europe. Akin to these remains are the gigantic tumuli left in the valleys of the Mississippi and its tributaries by the strange race that we call the Mound- Builders, and of which we know nothing except that in these mounds, shaped in the form of altars, geometric figures, or totem animals, are found objects of stone, shell, bone and beaten metal which place these mysterious men at the end of the neolithic period.

If from such remains we attempt to patch together some picture of the New Stone Age, we find at once a startling innovation—agriculture. In one sense all human history hinges upon two revolutions: the neolithic passage from hunting to agriculture, and the modern passage from agriculture to industry; no other revolutions have been quite as real or basic as these. The remains show that the Lake-Dwellers ate wheat, millet, rye, barley and oats, besides one hundred and twenty kinds of fruit and many varieties of nut¹⁵. No ploughs have been found in these ruins, probably because the first ploughshares were of wood—some strong tree-trunk and branch fitted with a flint edge; but a neolithic rock-carving unmistakably shows a peasant guiding a plough drawn by two oxen.¹⁶ This marks the appearance of one of the epochal inventions of history. Before agriculture the earth could have supported (in the rash estimate of Sir Arthur Keith) only some twenty million men, and the lives of these were shortened by the mortality of the chase and war;¹⁷ now began that multiplication of man-kind which definitely confirmed man's mastery of the planet.

Meanwhile the men of the New Stone Age were establishing another of the foundations of civilization: the domestication and breeding of animals.

¹⁴ Remains of similar lake dwellings have been found in France, Italy, Scotland, Russia, North America, India, and elsewhere. Such villages still exist in Borneo, Sumatra, New Guinea, etc.

¹⁵ Venezuela owes its name (Little Venice) to the fact that when Alonso de Ojeda discovered it for Europe (1499) he found the natives living in pile-dwellings on Lake Maracaibo.¹⁶

Doubtless this was a long process, probably antedating the neolithic period. A certain natural sociability may have contributed to the association of man and animal, as we may still see in the delight that primitive people take in taming wild beasts, and in filling their huts with monkeys, parrots and similar companions... The oldest bones in the neolithic remains (ca. 8000 B.C.) are those of the dog—the most ancient and honorable companion of the human race. A little later (ca. 6000 B.C.) came the goat, the sheep, the pig and the ox... Finally the horse, which to paleolithic man had been, if we may judge from the cave drawings, merely a beast of prey, was taken into camp, tamed, and turned into a beloved slave;“ in a hundred ways he was now put to work to increase the leisure, the wealth, and the power of man. The new lord of the earth began to replenish his food- supply by breeding as well as hunting; and perhaps he learned, in this same neolithic age, to use cow's milk as food.

Neolithic inventors slowly improved and extended the tool-chest and armory of man. Here among the remains are pulleys, levers, grindstones, awls, pincers, axes, hoes, ladders, chisels, spindles, looms, sickles, saws, fish-hooks, skates, needles, brooches and pins.” Here, above all, is the wheel, another fundamental invention of mankind, one of the modest essentials of industry and civilization; already in this New Stone Age it was developed into disc and spoked varieties. Stones of every sort—even obdurate diorite and obsidian—were ground, bored, and finished into a polished form. Flints were mined on a large scale. In the ruins of a neolithic mine at Brandon, England, eight worn picks of deerhorn were found, on whose dusty surfaces were the finger-prints of the workmen who had laid down those tools ten thousand years ago. In Belgium the skeleton of such a New Stone Age miner, who had been crushed by falling rock, was discovered with his deerhorn pick still clasped in his hands;. across a hundred centuries we feel him as one of us, and share in weak imagination his terror and agony. Through how many bitter millenniums men have been tearing out of the bowels of the earth the mineral bases of civilization!

Having made needles and pins man began to weave; or, beginning to weave, he was moved to make needles and pins. No longer content to clothe himself with the furs and hides of beasts, he wove the wool of his sheep and the fibres found in the plants into garments from which came the robe of the Hindu, the toga of the Greek, the skirt of the Egyptian, and all the fascinating gamut of human dress. Dyes were mixed from the juices of plants or the minerals of the earth, and garments were stained with colors into luxuries for kings. At first men seem to have plaited textiles as they plaited straw, by interlacing one fibre with another; then they pierced holes into animal skins, and bound the skins with coarse fibres passing through the holes, as with the corsets of yesterday and the shoes of today; gradually the fibres were refined into thread, and sewing became one of the major arts of woman-kind. The stone distaffs and spindles among the neolithic ruins reveal one of the great origins of human industry. Even mirrors are found in these re- mains;“everything was ready for civilization.

No pottery has been discovered in the earlier paleolithic graves; fragments of it appear in the remains of the Magdalenian culture in Belgium, but it is only in the mesolithic Age of the Kitchen-Middens that we find any developed use of earthenware. The origin of the art, of course, is unknown. Perhaps some observant primitive noticed that the trough made by his foot in

clay held water with little seepage;. perhaps some accidental baking of a piece of wet clay by an adjoining fire gave him the hint that fertilized invention, and revealed to him the possibilities of a material so abounding in quantity, so pliable to the hand, and so easy to harden with fire or the sun. Doubtless he had for thousands of years carried his food and drink in such natural containers as gourds and coconuts and the shells of the sea; then he had made himself cups and ladles of wood or stone, and baskets and hampers of rushes or straw; now he made lasting vessels of baked clay, and created another of the major industries of mankind. So far as the remains indicate, neolithic man did not know the potter's wheel; but with his own hands he fashioned clay into forms of beauty as well as use, decorated it with simple designs,. and made pottery, almost at the outset, not only an industry but an art.

Here, too, we find the first evidences of another major industry-building. Paleolithic man left no known trace of any other home than the cave. But in the neolithic remains we find such building devices as the ladder, the pulley, the lever, and the hinge." The Lake-Dwellers were skilful carpenters, fastening beam to pile with sturdy wooden pins, or mortising them head to head, or strengthening them with crossbeams notched into their sides. The floors were of clay, the walls of wattle-work coated with clay, the roofs of bark, straw, rushes or reeds. With the aid of the pulley and the wheel, building materials were carried from place to place, and great stone foundations were laid for villages. Transport, too, became an industry: canoes were built, and must have made the lakes live with traffic; trade was carried on over mountains and between distant continents." Amber, diorite, jadeite and obsidian were imported into Europe from afar." Similar words, letters, myths, pottery and designs betray the cultural contacts of diverse groups of prehistoric men."

Outside of pottery the New Stone Age has left us no art, nothing to compare with the painting and statuary of paleolithic man. Here and there among the scenes of neolithic life from England to China we find circular heaps of stone called dolmens, upright monoliths called menhirs, and gigantic cromlechs-stone structures of unknown purpose-like those at Stonehenge or in Morbihan. Probably we shall never know the meaning or function of these megaliths; presumably they are the remains of altars and temples." For neolithic man doubtless had religions, myths with which to dramatize the daily tragedy and victory of the sun, the death and resurrection of the soil, and the strange earthly influences of the moon; we cannot understand the historic faiths unless we postulate such prehistoric origins." Perhaps the arrangement of the stones was determined by astronomic considerations, and suggests, as Schneider thinks, an acquaintance with the calendar. Some scientific knowledge was present, for certain neolithic skulls give evidence of trephining; and a few skeletons reveal limbs apparently broken and reset.

We cannot properly estimate the achievements of prehistoric men, for we must guard against describing their life with imagination that transcends the evidence, while on the other hand we suspect that time has destroyed remains that would have narrowed the gap between primeval and modern man. Even so, the surviving record of Stone Age advances is impressive enough: paleolithic tools, fire, and art; neolithic agriculture, animal breeding, weaving, pottery, building, transport, and

medicine, and the definite domination and wider peopling of the earth by the human race. All the bases had been laid; everything had been prepared for the historic civilizations except (*perhaps*) metals, writing and the state. Let men find a way to record their thoughts and achievements, and thereby transmit them more securely across the generations, and civilization would begin.

III. THE TRANSITION TO HISTORY

1. *The Coming of Metals*

Copper- Bronze -Iron

When did the use of metals come to man, and how? Again we do not know; we merely surmise that it came by accident, and we presume, from the absence of earlier remains, that it began towards the end of the Neolithic Age. Dating this end about 4000 B.C., we have a perspective in which the Age of Metals (and of writing and civilization) is a mere six thousand years appended to an Age of Stone lasting at least forty thousand years, and an Age of Man lasting (If we accept "Peking Man" as early Pleistocene) a million years. So young is the subject of our history.

The oldest known metal to be adapted to human use was copper. We find it in a Lake-Dwelling at Robenhausen, Switzerland, ca. 6000 B.C.; in prehistoric Mesopotamia ca. 4500 B.C.; in the Badarian graves of Egypt towards 4000 B.C.; in the ruins of Ur ca. 3100 B.C.; and in the relics of the North American Mound-Builders at an unknown age... The Age of Metals began not with their discovery, but with their transformation to human purpose by fire and working. Metallurgists believe that the first fusing of copper out of its stony ore came by haphazard when a primeval camp fire melted the copper lurking in the rocks that enclosed the flames; such an event has often been seen at primitive camp fires in our own day. *Possibly* this was the hint which, many times repeated, led early man, so long content with refractory stone, to seek in this malleable metal a substance more easily fashioned into durable weapons and tools." Presumably the metal was first used as it came from the profuse but careless hand of nature-sometimes nearly pure, most often grossly alloyed. Much later, doubtless-apparently about 3500 BC in the region around the Eastern Mediterranean-men discovered the art of smelting, of extracting metals from their ores. Then, towards 1500 B.C. (as we may judge from bas-reliefs on the tomb of Rekhmara in Egypt), they proceeded to cast metal: dropping the molten copper into a clay or sand receptacle, they let it cool into some desired form like a spear-head or an axe... That process, once discovered, was applied to a great variety of metals, and provided man with those doughty elements that were to build his great- est industries, and give him his conquest of the eanh, the sea, and the air. Perhaps it was because the Eastern Mediterranean lands were rich in copper that vigorous new cultures arose, in the founh millennium BC., in Elam, Mesopotamia and Egypt, and spread thence in all directions to transform the world...

But copper by itself was soft, admirably pliable for some purposes (what would our electrified age do without it?), but too weak for the heavier tasks of peace and war; an alloy was needed to harden it. Though nature suggested many, and often gave man copper already mixed and hardened with tin or zinc-forming, therefore, ready-made bronze or brass-he may

have dallied for centuries before taking the next step: the deliberate fusing of metal with metal to make compounds more suited to his needs. The discovery is at least five thousand years old, for bronze is found in Cretan remains of 3000 B.C., in Egyptian remains of 2800 BC., and in the second city of Troy 2000 BC.’ We can no longer speak strictly of an "Age of Bronze," for the metal came to different peoples at diverse epochs, and the term would therefore be without chronological meaning;’ furthermore, some cultures-like those of Finland, northern Russia, Polynesia, central Africa, southern India, Nonh America, Australia and Japan-passed over the Bronze Age directly from stone to iron;M and in those cultures where bronze appears it seems to have had a subordinate place as a luxury of priests, aristocrats and kings, while commoners had still to be content with stone.’ Even the terms "Old Stone Age" and "New Stone Age" are precariously relative, and describe conditions rather than times; to this day many primitive peoples (e.g., the Eskimos and the Polynesian Islanders) remain in the Age of Stone, knowing iron only as a delicacy brought to them by explorers. Captain Cook bought several pigs for a sixpenny nail when he landed in New Zealand in 1778; and another traveler described the inhabitants of Dog Island as "covetous chiefly of iron, so as to want to take the nails out of the ship."

Bronze is strong and durable, but the copper and tin which were needed to make it were not available in such convenient quantities and locations as to provide man with the best material for industry and war. Sooner or later iron had to come; and it is one of the anomalies of history that, being so abundant, it did not appear at least as early as copper and bronze. Men may have begun the art by making weapons out of meteoric iron as the Mound-Builders seem to have done, and as some primitive peoples do to this day; then, perhaps, they melted it from the ore by fire, and hammered it into wrought iron. Fragments of apparently meteoric iron have been found in predynastic Egyptian tombs; and Babylonian inscriptions mention iron as a costly rarity in Hammurabi's capital (2100 B.C.). An iron foundry perhaps four thousand years old has been discovered in Northern Rhodesia; mining in South Africa is no modern invention. The oldest *wrought* iron known is a group of knives found at Gerar, in Palestine, and dated by Petrie about 1350 B.C. A century later the metal appears in Egypt, in the reign of the great Rameses II; still another century and it is found in the IEgean. In Western Europe it turns up first at Hallstatt, Austria, ca. 900 BC, and in the La Tene industry in Switzerland ca. 500 BC. It entered India with Alexander, America with Columbus, Oceania with Cook.” In this leisurely way, century by century, iron has gone about its rough conquest of the earth.

2. Writing

*Its possible ceramic origins-The "Mediterranean Signary"-
Hieroglyphics-Alphabets*

But by far the most important step in the passage to civilization was writing. Bits of pottery from neolithic remains show, in some cases, painted lines which several students have interpreted as signs.” This is doubtful enough; but it is possible that writing, in the broad sense of graphic symbols of specific thoughts, began with marks impressed by nails or fingers upon the still soft clay to adorn or identify pottery. In the earliest

Sumerian hieroglyphics the pictograph for bird bears a suggestive resemblance to the bird decorations on the oldest pottery at Susa, in Elam; and the earliest pictograph for grain is taken directly from the geometrical grain-decoration of Susa and Sumerian vases. The linear script of Sumeria, on its first appearance (ca. 3600 B.C.), is apparently an abbreviated form of the signs and pictures painted or impressed upon the primitive pottery of lower Mesopotamia and Elam..... Writing, like painting and sculpture, is probably in its origin a ceramic art; it began as a form of etching and drawing, and the same clay that gave vases to the potter, figures to the sculptor and bricks to the builder, supplied writing materials to the scribe. From such a beginning to the cuneiform writing of Mesopotamia would be an intelligible and logical development.

The oldest graphic symbols known to us are those found by Flinders Petrie on shards, vases and stones discovered in the prehistoric tombs of Egypt, Spain and the Near East, to which, with his usual generosity, he attributes an age of seven thousand years. This "Mediterranean Signary" numbered some three hundred signs; most of them were the same in all localities, indicating commercial bonds from one end of the Mediterranean to the other as far back as 5000 B.C. They were not pictures but chiefly mercantile symbols-marks of property, quantity, or other business memoranda; the berated bourgeoisie may take consolation in the thought that literature originated in bills of lading. The signs were not letters, since they represented entire words or ideas; but many of them were astonishingly like letters of the "Phoenician" alphabet. Petrie concludes that "a wide body of signs had been gradually brought into use in primitive times for various purposes. These were interchanged by trade, and spread from land to land, . . . until a couple of dozen signs triumphed and became common property to a group of trading communities, while the local survivals of other forms were gradually extinguished in isolated seclusion. That this signary was the source of the alphabet is an interesting theory, which Professor Petrie has the distinction of holding alone...

Whatever may have been the development of these early commercial symbols, there grew up alongside them a form of writing which was a branch of drawing and painting, and conveyed connected thought by pictures. Rocks near Lake Superior still bear remains of the crude pictures with which the American Indians proudly narrated for posterity, or more probably for their associates, the story of their crossing the mighty lake... A similar evolution of drawing into writing seems to have taken place throughout the Mediterranean world at the end of the Neolithic Age.

Certainly by 3600 B.C., and probably long before that, Elam, Sumeria and Egypt had developed a system of thought-pictures, called *hieroglyphics* because practiced chiefly by the priests." A similar system appeared in Crete ca. 2500 B.C. We shall see later how these hieroglyphics, representing thoughts, were, by the corruption of use, schematized and conventionalized into syllabaries- i.e., collections of signs indicating syllables; and how at last signs were used to indicate not the whole syllable but its initial sound, and therefore became letters. Such alphabetic writing probably dates back to 3000 B.C. in Egypt; in Crete it appears ca. 1600 B.C." "The Phoenicians did not create the alphabet, they marketed it; taking it apparently from Egypt and Crete," they imported it piecemeal to Tyre, Sidon and Byblos, and exported it to every city on the Mediterranean; they were the middlemen, not the producers, of the alphabet. By the time of Homer the Greeks

were taking over this Phrenician-or the allied Aramaic-alpha- bet, and were calling it by the Semitic names of the first two letters (*Alpha, Beta*; Hebrew *Aleph, Beth*).’’

Writing seems to be a product and convenience of commerce; here again culture may see how much it owes to trade. When the priests devised a system of pictures with which to write their magical, ceremonial and medical formulas, the secular and clerical strains in history, usually in conflict, merged for a moment to produce the greatest human invention since the coming of speech. The development of writing almost created civilization by providing a means for the recording and transmission of knowledge, the accumulation of science, the growth of literature, and the spread of peace and order among varied but communicating tribes brought by one language under a single state. The earliest appearance of writing marks that ever-receding point at which history begins.

3. Lost Civilizations

Polynesia – "Atlantis"

In approaching now the history of civilized nations we must note that not only shall we be selecting a mere fraction of each culture for our study, but we shall be describing perhaps a minority of the civilizations that have probably existed on the earth. We cannot entirely ignore the legends, current throughout history, of civilizations once great and cultured, destroyed by some catastrophe of nature or war, and leaving not a wrack behind; our recent exhuming of the civilizations of Crete, Sumeria and Yucatan indicates how true such tales may be.

The Pacific contains the ruins of at least one of these lost civilizations. The gigantic statuary of Easter Island, the Polynesian tradition of powerful nations and heroic warriors once ennobling Samoa and Tahiti, the artistic ability and poetic sensitivity of their present inhabitants, indicate a glory departed, a people not rising to civilization but fallen from a high estate. And in the Atlantic, from Iceland to the South Pole, the raised central bed of the oceans¹⁶ lends some support to the legend so fascinatingly transmitted to us by Plato,- of a civilization that once flourished on an island continent between Europe and Asia, and was suddenly lost when a geological convulsion swallowed that continent into the sea. Schliemann, the resurrector of Troy, believed that Atlantis had served as a mediating link between the cultures of Europe and Yucatan, and that Egyptian civilization had been brought from Atlantis.’’ Perhaps America itself was Atlantis, and some pre-Mayan culture may have been in touch with Africa and Europe in neolithic times. Possibly every discovery is a rediscovery.

Certainly it is probable, as Aristotle thought, that many civilizations came, made great inventions and luxuries, were destroyed, and lapsed from human memory. History, said Bacon, is the planks of a shipwreck; more of the past is lost than has been saved. \Ve console ourselves with the thought that as the individual memory must forget the greater part of experience in order to be sane, so the race has preserved in its heritage only the most vivid and impressive-or is it only the best-recorded?-of its cultural experiments. Even if that racial heritage were but one tenth as rich as it is, no one could possibly absorb it all. We shall find the story full enough.

¹⁶ A submarine plateau, from 5000 to 3000 metres below the surface, runs north and south through the mid-Atlantic, surrounded on both sides by "deeps" of 5000 to 6000 metres.

4. Cradles of Civilization

Central Asia – Anau- Lines of Dispersion

It is fitting that this chapter of unanswerable questions should end with the query, "Where did civilization begin?"-which is also unanswerable. If we may trust the geologists, who deal with prehistoric mists as airy as any metaphysics, the arid regions of central Asia were once moist and temperate, nourished with great lakes and abundant streams... The recession of the last ice wave slowly dried up this area, until the rainfall was insufficient to support towns and states. City after city was abandoned as men fled west and east, north and south, in search of water; half buried in the desert lie ruined cities like Bactra, which must have held a teeming population within its twenty-two miles of circumference. As late as 1868 some 80,000 inhabitants of western Turkestan were forced to migrate because their district was being inundated by the moving sand. There are many who believe that these now dying regions saw the first substantial development of that vague complex of order and provision, manners and morals, comfort and culture, which constitutes civilization:

In 1907 Pumpelly unearthed at Anau, in southern Turkestan, pottery and other remains of a culture which he has ascribed to 9000 B.C., with a possible exaggeration of four thousand years." Here we find the cultivation of wheat, barley and millet, the use of copper, the domestication of animals, and the ornamentation of pottery in styles so conventionalized as to suggest an artistic background and tradition of many centuries." Apparently the culture of Turkestan was already very old in 5000 B.C. Perhaps it had historians who delved into its past in a vain search for the origins of civilization, and philosophers who eloquently mourned the degeneration of a dying race.

From this center, if we may imagine where we cannot know, a people driven by a rainless sky and betrayed by a desiccated earth migrated in three directions, bringing their arts and civilization with them. The ans, if not the race, reached eastward to China, Manchuria and North America; southward to northern India; westward to Elam, Sumeria, Egypt, even to Italy and Spain." At Susa, in ancient Elam (modern Persia), remains have been found so similar in type to those at Anau that the re-creative imagination is almost justified in presuming cultural communication between Susa and Anau at the dawn of civilization (ca. 4000 B.C.): A like kinship of early arts and products suggests a like relationship and continuity between prehistoric Mesopotamia and Egypt.

We cannot be sure which of these cultures came first, and it does not much matter; they were in essence of one family and one type. If we violate honored precedents here and place Elam and Sumeria before Egypt, it is from no vainglory of unconventional innovation but rather because the age of these Asiatic civilizations, compared with those of Africa and Europe, grows as our knowledge of them deepens. As the spades of archeology, after a century of victorious inquiry along the Nile, pass across Suez into Arabia, Palestine, Mesopotamia and Persia, it becomes more probable with every year of accumulating research that it was the rich delta of Mesopotamia's rivers that saw the earliest known scenes in the historic drama of civilization.

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