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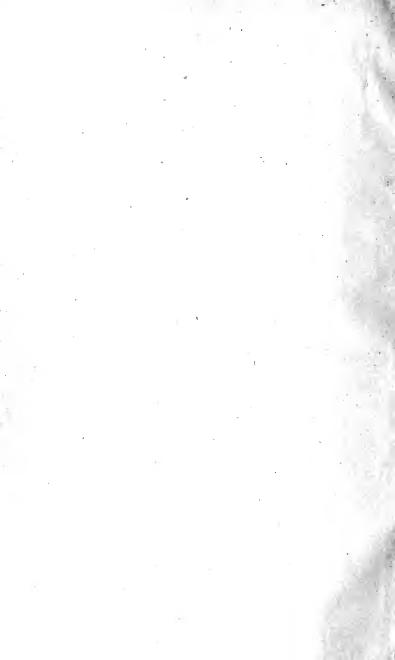
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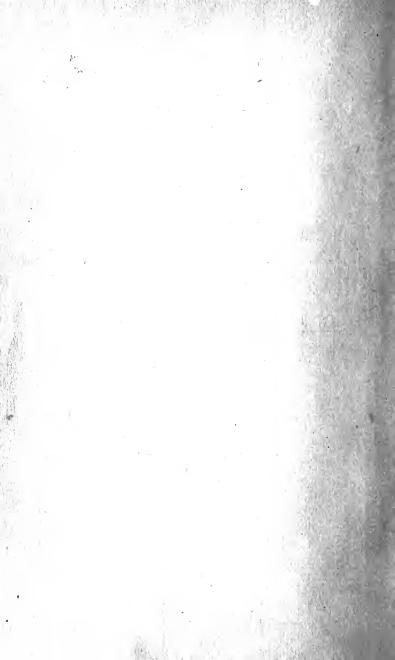






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DAWN OF ART IN THE ANCIENT WORLD



DAWN OF ART

IN THE

ANCIENT WORLD

An Archaeological Sketch

BY

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PREFACE

THE kernel of the following book is the substance of three lectures, delivered at the Royal Institution in January 1891. These have been entirely rewritten and approximately doubled in length; but, even in their revised state, they are not to be regarded as forming a handbook, however brief, of the large subject with which they deal. They are, and are intended to be, of a personal character. They present, not a simple and precise survey of known facts with regard to the beginnings of art and civilisation in the ancient world, but rather an account of the deductions, impressions, hardy generalisations, and even sometimes (if you will) of the guesses of an individual mind in the presence of those facts.

Discovery advances apace. Since these sheets have been printed off, important papers have been read at the Oriental Congress, to which reference might have been made in the text. Moreover, Mr. Flinders Petrie's valuable *Notes on the Antiquities of*

Mykenae have appeared in the belated twelfth volume of the Journal of Hellenic Studies. They are in substantial agreement with my own conclusions, but they contain a more accurate approximation to the dates of the different Ægean remains than has before been arrived at. The following passage (p. 204) is too important not to be quoted:—'We have been led to place the flourishing period of pre-Hellenic (Ægean) art to about 1500 or 1400 B.C., when intercourse with Egypt was common. The great treasury tombs probably range from this time to 1200, when the Vaphio tomb was built. At about 1150 the graves were made in the circle at Mykenae, and decadence had already set in. From 1100 to 800 B.C., or until the art was crushed by the Dorian migration, the prevalent decorations were impressed glass; and to this age belong the beehive tomb of Menidi and the private tombs of Mykenae, Spata, and Nauplia. The range of this civilisation was from the north of Europe down to Egypt, not only by distant trade, but by familiar intercourse.'

I regret that I did not read Mr. Frazer's valuable work, The Golden Bough, till these sheets had been

printed off; otherwise I should have referred to the interesting speculations as to the origin and doctrine of Totemism which he there records or suggests. The book, however, is one which no student of the beginnings of art and civilisation can afford to neglect.

I have reprinted, as the last chapter of this book, an article on the 'Cats of Ancient Egypt,' which originally appeared in the *English Illustrated Magazine*. It amplifies in some respects one or more of the subjects referred to or discussed in the earlier chapters.

The address on the Succession of Ideals, printed as introductory chapter to this volume, was originally intended to perform such a function; but it was to have been followed by a series of chapters dealing in turn with the ideals of all the great art-epochs of the world. Other points of view have, however, in the meantime proved more attractive, and that scheme has been abandoned. The address, as it now stands, is not in perfect harmony with the chapters that follow, but I have preferred to print it as it was written rather than to meddle with the expression of

an idea which belongs more to my memory than to my present thoughts.

In conclusion, I have to thank my friend, Mr. R. Weir Schultz, whose good work on the ancient and Byzantine architecture of Greece is so well known, for employing some of his leisure time in drawing for me all except one of the illustrations to this book.

W. M. C.

Scheveningen, September, 1891.

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- 'No being soever born, or put together, can overcome the dissolution inherent in it; no such condition can exist. Decay is inherent in all component things; work out your salvation with diligence.'—GAUTAMA.
- ' Jedes erste Gefühl ist ein Morgenstern, der ohne unterzugehen bald seinen Zauberschimmer verliert und durch das Blau des Tags verhüllt weiter zieht. –JEAN PAUL.
- 'These things can have no being unless they have their being from Thee; these things which rise and set, and, at their rising, begin as it were to be and grow that they may reach their perfection, and when perfected wax old and perish. And all things grow not old; but all perish. In truth when they are arising and beginning to be, the more they speed to grow into being, the more they speed towards ceasing to be. This is the law of them. Thus much hast Thou appointed them, because they are portions of things, which exist not all at once, but by their departures and successions they together complete that universe whereof they are portions. . . . If the sense of thy flesh had capacity to comprehend the whole, and had not itself . . . been limited to a part of the whole, thou wouldest desire that whatsoever existeth in the present should pass away, that so the whole might please thee more.'—
 S. AUGUSTINE.



CHAPTER I.

THE SUCCESSION OF IDEALS.1

A SUGGESTIVE kind of picture used to hang in many a mediæval church. It was painted on both sides of a board. In front were a pair of lovers walking hand in hand through fields gay with Spring. Flowers blossomed about their feet. Birds sang in the budding trees above their heads. Clear were the skies; fragrant the breezes that lifted the maiden's hair and cooled the brow of her ardent lover. On the reverse was the grim figure of Death, hour-glass and scythe in hand. The thing, pendent from a single cord, hung free in a draughty place, and the air twisted it about hither and thither, so that one side and the other were seen in swift interchange.

The history of mankind, as philosophers paint it, may be likened unto this picture. Some flatter us with the belief that it is a tale of progress; in the mouth of others it is a story of failure.

¹ Delivered in St. George's Hall, Liverpool, as an Address at the opening of the University College Session, 2d Oct. 1886.

From the scientific standpoint we behold a record of victory. Knowledge increasing; man growing in power of self-indulgence; Nature yielding up her secrets and with them some of her material wealth. We know more of the past than our forefathers did; perhaps we can predict a little more about the future. We have greater powers of organisation; more of what is mistaken for possessions or mislabelled knowledge.

But, with a change of mood, the mental picture turns, and then how different its aspect! Generation succeeding generation, people following people, race supplanting race. Each in turn struggling forward after some phantom of hope that it paints for itself. Each failing to attain the millennium of its fancy. Each destroying its forefathers and its companions in the vain struggle. Each vanishing into the past and leaving, it would seem, little but the memory of itself behind.

All the joy and stimulus of life lies in the sense of growth, of advance, of attaining towards something. Memory is but a feeble glimmer in the lamp of delight. Hope alone kindles true joy—hope culminating in sudden fruition. Then memory comes in to soften the subsequent sorrow, for the passing away and fading of things is the raw material out of which sorrow is made. The first bright day of Spring raises

contrary emotions to those produced by the last of Autumn. Budding green on a background of brown is a cheerier sight than the whole spectrum abroad on a fading forest.

'It is the first mild day of March:
Each minute sweeter than before,
The redbreast sings from the tall larch
That stands beside our door.

There is a blessing in the air
Which seems a sense of joy to yield
To the bare trees, and mountains bare,
And grass in the green field.

One moment now may give us more Than fifty years of reason: Our minds shall drink at every pore The spirit of the season.'

What a different emotion breathes in these lines from that exhaled by

'Those fallen leaves that kept their green, The noble letters of the dead.'

Hence it comes that we call the powers good which effect growth, and those evil which effect decay. As Mephisto says:

'So ist denn alles, was ihr Sünde, Zerstörung, kurz das Böse nennt, Mein eigentliches Element.'

We are forced to adopt this attitude towards the two great formative powers, the powers of growth and decay, because our thoughts are imprisoned in the



dungeons of time, and we estimate everything by its appearance or effect at some particular moment.

But in looking back upon the past we may adopt another attitude. We may regard its whole domain as one great area, in which Time, like another spacedimension, merely fixes the position of co-existent things. This is the view which the poet attributes to his friend in the other life, where

'No shade can last
In that deep dawn behind the tomb,
But clear from marge to marge shall bloom
The eternal landscape of the past;
A lifelong tract of time revealed.'

From this exalted standpoint Good and Evil assume a new aspect. In Time, they seem to produce growth and decay; they have the appearance of forces contending one against another. But, in the Eternity of which the poet speaks, their opposition does not exist. Good and Evil become merely the expression of the fact that everything has beginning and end; that everything is bounded in Time also as well as in Space and not cumbered with a useless infinity. Each nation has its beginning and end, its rise and fall, else would the whole area of the past be full of it, instead of richly peopled in all variety. Each school of thought has beginning and end, else were the wealth of the past nothing and all its products samesome. A field in spring-time is fairer for

its many flowers than it would be if carpeted by one gigantic corolla; and just so the variety and multiplicity of the products of the past are its glory, and that variety and multiplicity arise because all things have both beginning and end, because everything includes within itself the seeds of decay as well as of growth; for the world would be cursed by Good if it were not blessed with Evil.

The student of history whose avenue of access to the past is bordered by those existing objects which bygone men moulded into artistic form, cannot fail, sooner or later, to adopt this point of view. The past, apart from its effect upon the present, has a real existence for him, and its power to interest and instruct lies in its endless variety. Works of art are the material expression of their makers' delight. Therefore if the ideal and joy of all generations had been the same, art would have been uniform and production might long ago have ceased. But from the beginning up till now men have changed their ideal from age to age by modifying it from moment to moment. The faith of one nation has differed from the faith of another. Enthusiastic preaching founds what infidelity at length destroys. The fetich of the individual was succeeded by the little divinities of the family, the place, or the clan, and they by the nation's god of battle and victory (Ammon, or Asshur,

or another), only in their turn to fade away before the great God of all the nations, the World-God of Truth and Justice, till in the fulness of time the Universe-God of Mercy and Love should be revealed.

Equally various have been the things men hoped for. Here at one time they have loved the aspect of repose and power in monumental and everlasting calm; there at another they have delighted in continuous combat with man or beast. Now they have sold themselves for money, and left a barren record to be their scorn; or again they have sacrificed their comforts, and even their lives, to raise some structure of heavenly beauty, their glory and their crown for ever in the wide kingdom of the deathless past. Now the home of their fancy and the abiding-place of their faith has been a realm peopled with heroes, majestic in perfection of beauty, faultless in action and serene in thought; now it has been some mystic place, indescribable save by symbolic means, where Majesty unapproachable, Holiness unutterable, Power illimitable have overshadowed and overwhelmed all else by excess of splendour. And yet again with ceaseless fertility Fancy has conjured up other radiant phantoms for her delight. She has pictured to herself, and called upon her servants to endow with enduring form, a heaven of everlasting rapture and mirth amidst

'gardens wherein rivers flow'; or the beautiful bower of the gentlest and fairest of queens nursing for ever her faultless babe, with angels of light to be his playfellows and the saints of God to rejoice in him through all the twilight hours of an eternity of summer. Permanence in repose, triumph in victory, perfection of form, grandeur of ideal character, superhuman majesty, boundless pity and love, and finally all-round humanity, pure and simple for its own sake—these, and a thousand more, have been the ideals which men have worshipped and loved and fought and died for, painted and sculptured and sung, each in its turn, since man became the creature that we know.

Moreover, no two nations, whether contemporary or not, are circumstanced alike. Economic conditions change. Different countries have different climates, and all the factors of civilisation vary from time to time as well as from place to place. Thus just as no ideal returns to be the goal towards which a second civilisation tends, neither are the conditions ever twice the same which determine the manner of an ideal's enshrinement.

The prehistoric cave-dweller could but scratch images of the beasts of the chase upon the bones which himself had gnawed clean. The early Chaldean was forced to build with mud and to invent

and perfect the art of the potter; sherds were his vehicle and a few colours his only allies. In the valley of the Nile in the days of the Pharaohs, nature and circumstance combined to force the Egyptians to sculpture in granite and build for the ages; and the granite re-acted upon the sculptor, chastening his style and solemnising his ideal. The same Providence that formed the Greek gave him stores of purest marble close at hand, and the marble mastered the master that mastered it. The freer and more fanciful temper of the Gothic sculptors of France found fitting and happy scope for exercise in giving less perfect but more varied form than the Greeks attempted to sandstone, which alone nature provided for them in rich profusion. So it has been and must be and will be till man has played out his part, and the universe requires a change even from him.

Neither again are social and political conditions ever twice the same, and the spiritual and intellectual ideals of a day are always functions of the actual conditions of life. Christianity in imperial Byzantium was different from Christianity in feudal France, and different again from Christianity in commercial England. Each change in political and social structure that the world passes through is accompanied by and expressed in a revolution or reformation of religious forms, that reformation being sometimes brought about

by a gradual alteration in the attitude of individuals, but more often (owing to the mutual dependence of religious and political authorities and to the complication of vested interests) involving also political revolution—visible boundary of a world-epoch.

And just as political structure never again returns the same and is identical in no two countries, neither, even if the same ideal could return, would it find the same expression under new conditions. The hierarchy of heaven to the subjects of the Eastern Empire was a reflection of the powers of the imperial court. Feudal Europe pictured it as organised, even it also, on feudal principles.

Thus the spiritual and intellectual products of the human mind are different at different times and in different places. It is with humanity as it is with the individual. No one is the same at any two moments. What a man strives and hopes and even lies and sins for at one time may be unattractive, may be hateful to him, at another. No conception returns unmodified to the mind. If an artist could wholly forget some work of his creation he yet could never design the same again. A painter cannot even copy his own pictures without alteration. If an author's manuscript is burnt before publication he cannot reproduce it. Do what he will his work repeated results in something new. The ideals of youth, of middle life, and

of age, how they differ one from another! differ as widely as the ideals of different men. So is it with the individual, so too with the nation, so with the race and the sum of the races. There is nothing that is not new under or above the sun.

But bygone ideals are often powerful still. That which mankind as a whole, or which nations as a whole, have at any time striven after, in so far as they have attained it, enters into the sum of human possession and may become the property of the individual; nay, if it has once produced a moulding effect upon the race, heredity stamps the sign of it on the babe unborn.

Any study if pursued to the end leads on to all other studies. Any fact may be chosen as the centre of all knowledge; because the universe of possible knowledge is infinite, whilst the area of what is known is bounded on all sides.

'Sphaera cujus centrum ubique, circumferentia nullibi.'

But the boundaries of the known are constantly enlarged, first in one direction, then in another, by the passionate striving of men outwards. The goal-point of one generation's endeavour becomes a detail of the possessions of the next. I do not so much refer to the mere brute facts that men win from the unknown; those are the raw material out of which an ideal, by

its formative power, moulds true knowledge—that is to say, in its broadest sense, self-knowledge. A fact must be won from the unknown by the man of science, brought into connection with other facts by the philosopher, finally made strong for good by the idealist—poet, artist, prophet—call him what you please.

The Ancient Hebrews harmonised the world to their minds by an ideal different from ours. Honestly working in the light of that, they accomplished wonders before their power ceased and their ideal departed. Yet that same ideal still exists and produces its effect upon individuals, forming part of the common stock of our intellectual possessions. So again the Hellenic ideal, fine and potent as it was, failed into the past when it had done its work; yet it still exists and still produces an effect, but upon the individual instead of the race.

The centre of effort changes, but that which has been a centre ceases not to exist because the forces of humanity bear past it instead of upon it. A fact does not become more true by being known, nor an ideal more fine because men strive towards it. The ideal of a day puts on a more attractive splendour at the time of its culmination, and makes other ideals pale in comparison, but when it shrinks back into the ranks of its fellows of the past its true magnitude

becomes for the first time estimable. That 'Liberty, Equality, and Fraternity' ideal for instance, what a coruscating portent it was when it swept over the wondering world! It is now gathering up its shrunken tail, and in another century or two men will be able to take the just measure of it, compared for instance with its flaming predecessor of the Reformation days.

Whatever part of any ideal is true and good remains for ever a possession of mankind, though it will often be found on examination, and perhaps it may always be the case, that whatever is fundamentally new in it is not true, and whatever fundamentally true not new. The great value of all ideals lies not in their novelty, but in their harmonising power. It is the possession of a common ideal, unknown though it be to themselves, that makes the varied labours of all the men of one civilisation and day mutually helpful, without any definite intention on their part that it shall be so. The common aim towards truth, which as far as one can judge is the ideal of our civilisation, harmonises the work of men of every science, and with it that of philosophers, historians, and even artists. The labours of geologists, physicists, astronomers, and biologists combine to throw light the question of the antiquity of man. engineer investigating the phenomena of non-tidal estuaries prepares a weapon which the historian of

Ancient Egypt uses. Results arrvied at by the embryologist place powerful arguments at the disposal of the student of the development of historic and prehistoric schools of art. The common aim towards truth admits of infinite combination with minor ideals of endless variety, but it rules all the work that has any element of reality about it at the present day. Truth indeed is no new discovery: it is wondrous old. Individuals have followed its light, but no civilisation was ever based upon the search after it before, nor by the nature of things well could have been. It was only when science, having elaborated her methods, was enabled to take the lead, that her virtue could become the leading one; just as the local god Ammon of Thebes became the great god of Egypt when Thebes raised herself to be the capital of the country.

Thus a new ideal is not necessarily, and is perhaps never, a new discovery. It is merely that out of the infinity of possible virtues one takes the lead, that amongst the infinity of possible aims one is chiefly sought unto. The value of any ideal depends, at any rate, not upon its novelty but upon the results it produces. That ideal may assuredly be reckoned the most precious which has given the world the noblest lives and enshrined itself in the noblest forms. And that ideal is assuredly the most base which has

produced a race of self-seeking men and left behind it no lasting memorials of excellent thought to delight and chasten posterity. Between the ideal of selfsacrifice and the ideal of money-making there is indeed a great gulf fixed.

Every ideal worthy of the name manages to get itself enshrined in some form that would endure if only men cared to preserve their heritage from the past. What a multitude of glorious possessions we might have, not if our forefathers had devoted more of their energies to making fine things, but if they and we had devoted less to destroying those already made. The mind fails in attempting to grasp some measure of the loss that the world has suffered, not so much from neglect, which is partly excusable, but from wilful and insane destruction. The temple called the Labyrinth, one of the mightiest buildings ever raised, might be standing now in almost perfection of repair, if men had not knocked it over to build miserable dwellings for their transient selves; and so with half the other temples of Ancient Egypt. The polished granite casing of many colours was stripped from the Great Pyramid only a few centuries ago. The smile of the Sphinx was shot away by the playful bullets of the cultured French. The palaces of Assyria were burnt down. The glorious Parthenon existed long enough in tolerable repair to find itself sent to heaven

by gunpowder. Some ten thousand marble statues were burnt into lime in the plains of Olympia alone. Almost every one of the battalions of bronze statues which Ancient Greece produced has been melted down into cannon or other mean articles; and, of course, cupidity swiftly disposed of those made of gold and ivory. All the temples and public buildings of Ancient Rome, with a few minor exceptions, are gone. The indescribable glories of Byzantium can hardly be guessed at. Only a disguised Hagia Sophia remains, a mere trifle from the most wondrous city in ancient Christendom. The monuments of the Middle Ages have fared little better. Some buildings we possess, but how damaged! Shorn of their colour on wall and window, robbed of their statuary and their furniture. Some paintings, too, but mostly ruined by ignorant and irreverent restoration. The tables of a room would hold all the wonderful remnants of work in the precious metals which have come down to us from mediæval hands. And so one could go on for hours, and the half would not be told.

All these things have been destroyed, and the world has not been enriched with better, or so good, to take their place. Nor can aught take their place, be it ever so fine, for they were the shrines of bygone ideals, makeable when they were made, and then

only. He that destroys a thing that another once laboured to make murders a dead man. An honest carpenter may continue the influence of his honesty long after his death, if the work he has done be respected by those privileged to use it. If they wilfully destroy it, the good man's influence is at an end. The major part of the usefulness and power of many lies in the endurance of their work, and that endurance chiefly depends upon the piety of the generations that come after. The work of the dishonest clears itself speedily enough away, thank God!

What shall we say, then, of the lost plays of Æschylus and Sophocles, of the Zeus of Pheidias, of Leonardo's equestrian statue of Sforza, and all the infinity of glorious works and deeds which have vanished by the destruction or neglect of men? Are they everlastingly consumed, and is their glory a mere shivering of the air? Who shall make answer as to these things, or speak for any one but himself?

And yet if some transcendent being from another world were to come and say 'The past is not annihilated but only past,' I could not find it in my heart to deny the vision. Let us for a moment adopt that point of view. The poet's 'eternal landscape' then lies somewhere, only we cannot behold it, our dim sense of memory reaching thither alone, whilst sight and feeling are constrained into the present moment,

which like a wave across an infinite ocean bears us all along together. Noble deeds that none ever recorded or even saw, they are still there, and (who knows?) we might one day behold and rejoice in them. Noble lives, dimly remembered, they are all there complete, and all the noble works of men with them, in that eternal garden of the larger universe. There each bygone ideal still exists, with its expressions about it and the heroes that it made. Good indeed that they 'had their day and ceased to be,' else might not others have arisen and added to the glory of the sum of things.

So we may destroy what we please, and leave behind us whatever wilderness seems to us good to be our record in the face of Eternity. The noble works of noble men once made we may demolish, and so make the desert about us more complete; their noble deeds once done we may forget; but works and deeds are beyond our power to annihilate, they have a larger and higher existence there where the hand of man reaches no more back to wither and destroy. Dreaming of such an existence, and of such only, is it possible to say to any man, or race, or civilisation, or ideal, 'Esto perpetua!'

CHAPTER II.

ART IN THE STONE AGE.

Art is concerned; but at all times the factor making a thing a work of Art resides, not in the subject therein treated or represented, but in the manner or style (which alone is Art) Science can have nothing to do.

Yet, in another way, Art and Science have, in these latter days, come to be very closely connected. Science, though of proved unhelpfulness to the Artist,

has manifested herself as supremely valuable to the student of works of Art. Artists of all countries and periods are conditioned by the circumstances in which their lives are passed, and by the ideas prevalent among the societies and individuals for whom they work. Thus Art-History becomes a function of Social History, and cannot wisely be disregarded by the student of the history of the human race. Ancient works of art bring us into immediate contact with bygone peoples, and are often the only avenue whereby we can approach far-distant civilisations, lying silent on the verge of time. Thus the study of Art-History becomes a branch of Scientific inquiry. It has to be pursued by Scientific methods. Its results are of Scientific importance. It is a chapter, and perhaps the most pregnant chapter, of the science of Anthropology, which seems destined in the near future to no insignificant growth.

In the following pages stress will be laid as far as possible upon the scientific aspect of the subject under consideration. The reader will be called upon to consider the historical meaning rather than the æsthetic charms of the objects referred to. Within the brief limits of space at our disposal it will not be possible to do more than take a rapid survey of the large historical area that has to be traversed; nor can we consider the many alternative or opposing theories

as to individual points which will inevitably tempt us to interesting digressions in all directions. My desire is rather to suggest than to inform. The various areas of prehistoric and early historic archæology are constantly being expounded by competent specialists. The function which I have chosen for myself is to point out the connections which exist, or may be considered to exist, between one and another of these usually separated areas; but not to describe or investigate any of them in particular.

The entire activity of the human race, from the time when man first appeared upon the earth down to the present day, is one and indivisible. Few things have had to be twice invented or twice discovered. The ornaments that appear to-day upon our carpets and our wall-papers, or carved in stone upon our buildings, or molten in metal, or woven in fabrics, have a pedigree almost as long as the pedigree of man himself. Indeed the history of ornament is the main and farthest-reaching member of the history of Art. Rosettes and zigzags, meanders and spirals, foliations, knots, and interlacings, architectural mouldings, and every other form and design ever employed by the most exuberant artistic fancy-they all have a long and intricate history. Each of them was invented once, and once only. Each has been handed on from man to man, from generation to generation, from race to race. Each has been slowly modified, introduced into fresh combinations, turned to new decorative uses. We, in these modern days, inherit them all, and, alas! know not, often enough, what use to make of them.

To trace back to its original home each individual factor of ornament would be to solve the riddle of archæology, and that we are still far from accomplishing. We are only just beginning to learn how large a mass of relics of the past the earth has preserved for us in her ample bosom. The spade is but now commencing its work as a weapon of historical inquiry, and we remain wholly in the dark as to many important and indeed essential matters.

The existing distribution of the most ancient and unaltered human races upon the surface of the earth is by some held to prove that man appeared and took possession of all the great continents in Tertiary times. But the earliest discovered traces of human activity, old though they be, are fetched from no such abysmal antiquity. When the archæological survey of the world, now little more than begun, becomes wider extended and more accurately executed, we shall doubtless discover numerous indications of prehistoric human activity in places which have as yet yielded us no message from the distant past. It is only in the West of Europe that careful investigations have

been made, and even there the study is but begun. There is no reason for regarding the prehistoric inhabitants of France and England as anything more than representatives of the peoples, their contemporaries, in the rest of the world. They are the most ancient people known to us, but equally developed races may have preceded them elsewhere. Whence they came and whither they went, what was their kindred and who are their descendants, these and the like questions remain undecided, and need not even be considered in this place.

French archæologists divide the remains of palæolithic man, which have been discovered in their country, into four groups. The earliest group is represented by the finds made at Chelles and Saint-Acheul. The series of objects discovered at Moustier (in the Vézère valley) are characteristic of the second group. The third is represented by objects found in greatest profusion at Solutré (Saône-et-Loire), and Laugerie-Haute (by the Vézère), and the fourth by the finds in the cave called La Madeleine in the Vézère valley.¹ The first of these groups stands alone, and belongs to an earlier geological period than the rest. The remainder doubtless overlapped one

¹ An excellent *résumé* of the prehistoric archæology of France is M. Emile Cartailhac's *La France préhistorique* (Bibliothèque scientifique internationale), Paris, 1889.

another in point of time; but, broadly speaking, they too mark successive stages of human development.

The men of Chelles and Saint-Acheul are not known to us by their skeletons, but only by the remains of their industry. Rough implements, fashioned by them out of flint, quartz, and other chosen stones, have been discovered in the alluvial deposits of the rivers by whose banks they lived. We learn that they were a race of hunters, dwelling amidst a magnificent fauna, partly arctic, partly tropical in character. The mammoth, rhinoceros, cave-bear, urus, and various other animals now extinct, surrounded them, coming some from Asia, some from Africa, between which and Europe the Mediterranean did not then completely extend. The climate was warm and wet. It was a day of big rivers, big glaciers, and big volcanoes. The valleys and lowlands were filled with a rich vegetation, on which all manner of herbivorous beasts supported themselves in countless numbers. The men of that remote, interglacial age, besides making stone weapons, doubtless fashioned implements in wood or bone, and may have occupied their long leisure after a successful hunt by decorating their persons or the things that they used. No specimens of their art (if they had any), but only their stone tools, have

come down to us. Traces of peoples in a like stage of civilisation have been found in England, Spain and Portugal, the north and south of Africa, the United States, and India; but no existing savage tribe can be pointed to as living in the same stage of development. The Chelles period was of immense duration, at least as long as all the other three archæological periods put together; and the civilisation that characterised it was widely diffused over the world; but for the historian of Art this earliest known human stratum is not of interest.

The termination of the Chelles epoch was marked by a great climatic change, the commencement of a cold, dry period. The plains of Europe became such as now are the steppes of Asia, and man lived a life like that of the modern Eskimos. A new fauna resulted from the new conditions. The mammoth became rare and presently disappeared; with him, or before him, went many another beast. Their places were taken by animals suited to the new conditions. Chief amongst these were the wild horse and the reindeer. In the Moustier Cave, by the Vézère, and elsewhere, remains of the human industry of the new period have been discovered. Amongst them are stone implements of the Chelles type, side by side with others of more modern form. At Solutré, Laugerie-Haute, and other places, we are brought

into contact with a more advanced industry. Stone implements take a marked development. One of the same form is no longer employed for tools and weapons. Different forms of tool began to be made for different purposes, and made with remarkable skill. Examples of bone implements, too, are found in no small number. Italy, Belgium, and England contribute examples of this stage of human development, which, however, may have been a local rather than a universal phenomenon. Neither the Moustier group, however, nor the Solutré group, contains any objects which can be brought within the area with which the historian of Art is called upon to deal, so that we need not linger over them.

The last palæolithic period, sometimes called the Reindeer Age, affords the earliest material of study for the lover of art. The remains of human industry found in the cave of La Madeleine, in the Vézère valley (Dordogne), are characteristic of this epoch, which is, therefore, sometimes called after that site, Laugerie-Basse and Cro-Magnon (Dordogne), Massat and Mas d'Azil (Ariège), Bruniquel (Tarn-et-Garonne), Montgaudier (Charente), Lortel (Hautes-Pyrénées), Sordes (Landes), Chauffont (Vienne), and Veyrier (Savoy), besides many other places in England, Belgium, Switzerland, and Germany, as well as France, have yielded similar objects in considerable



number. Amongst them are still better flint implements than those buried in lower deposits, and consequently a more elaborate industrial product. Shells from the Mediterranean and the Atlantic, delicately perforated for stringing or attachment to garments, and the teeth of lions and bears formed into necklaces. prove that the people of La Madeleine were fond of personal adornment.) They may have tattooed or painted their bodies with the same red colour wherewith they sometimes covered the skeletons of their dead. They fashioned with visibly increasing dexterity all manner of barbed bone harpoons for the capture of fish. They made needles of bone, and therefore must have clothed themselves in garments of fur or skin. The existence of shells fetched from distant localities and of implements formed out of imported stones, proves that even then a rudimentary commerce had come into existence, the result, perhaps, not so much of barter as of tribal war and the wandering of peoples. | The occupations of the men of this important group were hunting and fishing. They had no domestic animals, made no pottery, and did not cultivate the ground. Those of them whose remains have been discovered lived near the mouth of caves or shelters, to which they may have added wooden outer walls or curtains of skin. Others may have dwelt in skin tents. The reindeer was the chief

object of their chase, and prodigious quantities of the bones of that animal have been discovered. They likewise hunted the wild horse, the urus, and whatever other beasts the fortunes of the day delivered into their hands.

(We are now interested in this human group, not as huntsmen, but because they, first of men, so far as we yet know, brought down from heaven to earth the divine flame of Art. The choice spirits amongst them occupied the long leisure that a hunter's life may afford, in engraving, with wondrous fidelity and an astounding artistic insight, likenesses of the animals wherewith the chase made them so intimately acquainted. We possess examples of their work wrought upon bone, horn, ivory, or stone, but it can scarcely be doubted that they employed also more perishable substances (such as wood), which have been destroyed in process of time. They not only engraved, but they occasionally sculptured in the round; and sometimes they even endeavoured to represent the human figure, either alone or in company with animals. One of the most interesting of the engraved bones found in La Madeleine Cave is a famous representation of a mammoth. The reindeer, of course, appears very frequently, and so does the horse. We also possess lifelike images of the seal, the cave-bear, the ibex, and many more. Birds are

not uncommon, and two or three kinds of fish have been readily recognised.

The spirit and vivid animation with which these engravings are often carried out are as surprising and delightful as the extraordinary delicacy of the workmanship. The British Museum possesses a tiny likeness of a reindeer's head, scratched upon the frail bone of a bird, which no reproduction can render. and which can only be properly appreciated when the bone is held in the hand and examined through a magnifying glass. In this, and indeed in the majority of examples, we meet with no faltering attempt at rude decoration, but with an art already developed —one with formed conventions, and a possibly long period of groping and study behind it. No traces, however, of any preliminary stages of development have come down to us. It is not merely the excellence of the result attained in many instances that astonishes us, it is the visible ease of the attainment, the freedom and certainty of the artist's hand, the . trained quickness of his vision, and the wisdom of his choice what to omit and what to emphasise. A natural artistic gift, trained by close observation of nature, such as feebly armed hunters must practise, can alone account for this kind of excellence. The remarkable comprehension of animal forms possessed by some of these palæolithic artists is even

more conspicuously manifested in the case of two horn daggers, one found at Laugerie-Basse, and the other at Bruniquel and now in the British Museum. In both instances the handle is fashioned in the similitude of a reindeer, and the beast is most skilfully adapted both to the form of the antler out of which it had to be carved and to the purpose which, as a dagger-handle, it had to serve. Portions of a statuette of a urus and the head of a horse (both from Mas d'Azil) are other notable examples of the perfection which these artists sometimes attained in sculpture.)

That accurate student, M. Piette, informs us, as the result of careful investigation, that this school of art was generated not by the decorative, but by the imitative or creative instinct. Sculpture in the round was more practised in the earlier stages, engraving on flat surfaces in the later. The likenesses of animals came first, then animals and foliation decoratively treated. Linear designs, such as zigzags, chevrons, and the like, and purely geometrical ornaments, came later still. (Last of all, at the very close of the Reindeer Age, we find traces of the simplest linear decoration, no longer engraved, but painted in red colour. Thus decoration arose out of imitation, not imitation out of decoration.)

Though the beasts of the chase formed the main

¹ See Piette's L'Art pendant l'Age du Renne.

subject of the palæolithic artist, he did not wholly neglect the human figure. Laugerie-Basse has yielded an ivory statuette of a woman (unfortunately lacking the head), an outline of a woman enceinte, and one of a man about to strike a dart into an unsuspecting urus. All these figures are nude.) They do not compare for excellence with the contemporary representations of animals. The contrast between the hunter and the urus is particularly marked. Man, then, was not yet so interested in himself as in animals. The fact is important. It is true of most undeveloped races, and particularly of hunting races.

One of the important factors contributory to the religions of historical antiquity was Totemism. Totems are usually, but not always, animals. They have been defined by Mr. Fraser as 'a class of material objects, which a savage regards with superstitious respect, believing that there exists between him and every member of the class an intimate and altogether special relation.' As a rule all the members of a tribe or tribal subdivision regard all of one kind of animal as their totems. Ancient Egyptian totems (which by the Historic Period had already developed into, or become identified with, gods) were such as the bull, the cat, the hawk, the jackal, the lizard, and so forth. Sometimes totems are kept as

pets. Savages generally refuse to kill or eat their totem. Occasionally they tattoo their skins with its likeness. They mourn over dead totems as over brothers. They regard themselves as of the kindred of the totem, and often, where Totemism and the cultus of the dead are both accepted, the totem animals are believed to be the abodes of the souls of dead tribesmen. If a tame totem is kept, it is treated with honour and apparently worshipped. Sometimes an image or idol of the totem is preserved with respect, and we shall find that totem-hutches, or the shrines for the images of totems, may have been one of the earliest forms of temple.

It is far from improbable that the animals depicted by the cave-artists were the totems of the cave-dwellers. If so, palæolithic man possessed germs of religious emotion such as underlay the ancient religious systems of the Egyptians, the Chaldeans, and even the Hebrews and Greeks. Thus, on the far horizon of time, we behold Art and Religion coming forth hand in hand. If not generated by the same emotions, at any rate the emotions by which they are generated arise in a common atmosphere. No large demand, therefore, is made upon our imagination when we are invited to cross the boundaries of certain knowledge and to behold, or at least to fancy that we behold, in these simple but pathetic monuments of

the first known artists of the world, the visible monuments of the first religious emotion.

It must be borne in mind that the remarkable artistic gift, which we have thus briefly discussed, belonged only to the single race of palæolithic men which inhabited the district of Western Europe bounded on the north by a line drawn through Derbyshire and Belgium, and on the south by the district of the Pyrenees and the Alps. The origins, the affiliations, and the fate of this race are unknown to us. Fortunately Laugerie-Basse, Cro-Magnon, and other sites have preserved representative skeletons of this important people, from which we are enabled not only to form a sound opinion as to their physical type, but to divine the character of their funeral rites.¹

¹ At the Paris Exhibition of 1889 there was shown a model representing the rock-shelter of Laugerie-Basse, at the level of M. Elie Massénat's diggings, restored as far as possible to its ancient state, and peopled with three life-size images of its ancient inhabitants. The proportions of the bodies were taken from actual skeletons discovered on the spot, and the flesh parts were modelled from living people having the same proportions, notably Berbers. A comparison has sometimes been suggested between the artistic product of the Cave-men and that of the Bosjesmans; with the latter I am wholly unacquainted. resemblance between the modern Eskimos and the Cave-men is in some respects striking. Both lived by reindeer hunting. There is, however, a marked contrast between them in artistic gift, rendered very evident by Professor Boyd Dawkins' comparison of the two arrow-straighteners. The childish hieroglyphics on the modern example do not even belong to the same category of human effort as the graceful foliated decoration of the ancient implement. The hieroglyphics may of course be a kind of petrified tradition handed down from a truly artistic period through generations of degenerate descendants.

Occasional discoveries of portions of human skeletons, apparently belonging to very early palæolithic times, have been made in various localities, but they have usually been so vaguely recorded, and their circumstances have been so inaccurately observed, as to render them useless for scientific purposes. In a few cases we have been more fortunate. The Baoussés Roussés caves, overlooking the Mediterranean, near Mentone, have yielded seven skeletons, all of one race. They were most carefully excavated, and important information has been derived from them. The objects buried with the bones make it appear that the men to whom they belonged lived in a stage of civilisation similar to that associated with the Moustier remains. Five skeletons were discovered in the rock-shelter of Cro-Magnon, where they were deposited by people of the Laugerie-Basse period, on the top of thick strata of debris accumulated through long years by people in the Solutré type of civilisation. A skeleton was also found at Laugerie-Basse, and other contemporary burials have been recorded at Bruniquel, Gourdan, Sordes, Raymonden (Dordogne), and other sites.

In every one of these cases of palæolithic burial it appears that the bones were not placed in their final resting-places until the flesh had been got rid of. Sometimes the flesh seems to have been scraped off,

sometimes gnawed off by animals. Now and then a few of the bones were lost in the process. unfleshed skeleton, with the bones still for the most part kept together by their proper ligaments, was taken and apparently clothed and adorned as it had been in life. It was then laid on the floor of the abode which the survivors still inhabited, and which had probably been the shelter of the deceased. The posture chosen was often that of sleep, the body lying on its side with the arms crossed, and the knees gathered up to the chin. The whole was covered over with a quantity of red powder, and a thin layer of ashes, or the other usual débris of the place, was spread over all. The survivors continued to live their accustomed life with the bones of the dead in their midst. We shall presently see that the habit of unfleshing the skeleton before final burial was continued in neolithic times. sponding neolithic use of red colour for the decoration of the bones has been observed in Italy by Signor L. Pigorini.

Why did the palæolithic folk of Baoussés Roussés, Cro-Magnon, and Laugerie-Basse bury treasures, which must have been very precious to them, with the bones of their dead? And why did they keep those bones within the precincts of the abodes in which the deceased had dwelt? The answer can scarcely be

doubtful. Because they believed in a ghostly world and some kind of continued ghostly existence. argued that when man began to think about death he compared it with states of suspended consciousness, like sleep or fainting. He accounted for these states as produced by the temporary separation from the body of its impalpable double or ghost. In his dreams he was conscious of this ghost of his, and all its wondrous adventures and experiences, the while his body remained heavy and motionless in one place; but, when he awoke, body and ghost appeared to unite, and the life of the body was in the union. imagined it would be thus with death also. Hence arose the doctrine of the ghost or double, which we find so highly developed in ancient Egypt, and which serves to explain many of the burial customs of ancient and even prehistoric folk. Death was the separation of the ghost or double from the body. The ghost, impalpable and generally invisible, but in all other respects like the body, and destined some day to be re-united with it, was conceived of as dwelling meanwhile in ghost-land, and there continuing to lead the self-same kind of life that the man had lived upon earth. A short step led to the further generalisation that every material thing, animate or inanimate, possessed a double. ghost of a man fed on the ghost of food, hunted

ghostly animals, and fought ghostly foes with the ghosts of weapons, was clothed with the ghost of clothing, dwelt in the ghost of a house, enjoyed the ghosts of luxuries, married the ghost of a wife, and was served by the ghosts of slaves. From China to the Bay of Biscay we find traces of this belief in Hence it came to pass that the bones of a dead man were laid in the very cave or dwelling in which he had lived, or in a barrow or tomb built or hewn into the semblance of it. Hence, too, the implements, weapons, and ornaments he had used in life (or similitudes of them), were buried with him, and sometimes not buried only but broken or destroyed, in order that by such fantastic death their ghosts might be set free for the ghostly user. It is thus, moreover, that we are enabled to explain the presence of food and drink, or of the painted or sculptured likenesses of foods and drinks which many of the most ancient sepulchres contain. If at any time captives, slaves, or wives were sacrificed at the funerals of the powerful, it was but a natural outcome of this theory. The ancient Egyptians, who were always dominated by a fatuous kind of logic, avoided so cruel a practice by burying with the dead painted or sculptured images of the servants a great man required; and the ghosts of these images, like the ghosts of depicted food, were made serviceable to the ghost of their owner through an occasional repetition, said by a living person on his behalf, of the Suten-ta-hotpu formula. The mediæval, and indeed modern, custom of observing saints'-days and praying for the dead descends by unbroken sequence from the custom of bringing offerings of food and drink to tombs, and of there reciting the formulæ on certain fixed days in the year. Ancestor-worship is a misleading term for this observance; it was magic ghost-feeding.

In many parts of the world the palæolithic stage of civilisation was succeeded by one more advanced, characterised by the use of polished in lieu of chipped stone axes. This new stage of development is called the neolithic. Somewhere, no doubt, neolithic civilisation developed directly out of palæolithic, but where that development took place we do not yet know. In Europe there appears to be an almost complete gap between the two. Wherever both palæolithic and neolithic remains have been discovered together, they are found to be separated by a bed of natural accumulations deposited during a considerable period, which has left no discoverable traces of the presence of man. Moreover, in the West of Europe neolithic civilisation is found to mark the advent of a new race, of which no examples have been found amongst palæolithic remains. The palæolithic Cro-

Magnon race did not, however, disappear with the old order of things. Skeletons of the Cro-Magnon type continue to be found, buried in the neolithic manner. But it seems clear that the new civilisation came in with a new and dominant race. This important social change took place concurrently with, or perhaps resulted from, an important alteration in climate and terrestrial form. England now became separated from Europe, and Europe from Africa. The cold, dry period passed away, and the climate we now experience began to prevail. At first there was a greater precipitation of rain and a damper soil consequent upon it than we now have, but in the main Europe may be said at this time to have definitely entered into the conditions that have since endured with little change. Of course the conditions no longer suited the reindeer, the cavebear, the urus, and animals of that kind. retreated north-eastwards with the cold, and it has been suggested that the bulk of the hunting races. who were accustomed to live upon them, followed their retreat. The neolithic peoples would thus find Western Europe largely depopulated, as well as excellently suited to be the home of the more advanced civilisation they brought with them.

We have seen that the palæolithics were huntsmen and little more. (The neolithics were farmers

and masters of many crafts. The manner of their life was therefore utterly different from that of the palæolithics, and they are represented by very different remains. These we must pass in brief review before we can approach the question of art. With the neolithics appeared the bulk of the domestic animals, none of which were known in palæolithic times. Palæolithic hunters did indeed pursue one type of horse, and the people of Solutré slaughtered such multitudes of it that the bones of some 40,000 horses have been discovered amongst their rubbish heaps. But this sort of horse became rare towards the close of the palæolithic period. It entirely disappeared at the commencement of the neolithic epoch, and for a time there was no horse in western Europe. Presently the domestic animal, of the small Shetland pony type, came in, we know not whence, and has maintained itself in our midst ever since. (The neolithics had the dog for a companion from the earliest time; in fact he appears to have been their first domestic animal. They afterwards added pigs, goats, sheep, and oxen. They cultivated flax and various kinds of grain. They knew how to spin, weave, grind corn, and make pottery. They were good carpenters, as the wood-built lake-dwellings prove. They mined for flints, and manufactured implements in great numbers on the spot, clearly for

purposes of trade and exportation. They invented a rudimentary division of labour. They built stone monuments and excavated caverns. They used boats of the dug-out sort, as much as forty feet in length, and with these they went sea-fishing and navigating. Polished stone implements found on many islands show that the sea was traversed by people in a neolithic stage of evolution, a conclusion which the study of existing savage races supports. At the time of widest extension of neolithic civilisation it had established itself in the valley of the Nile and other parts of North and South Africa, in the valley of the Tigris and Euphrates, in India, Oceania, North and South America, as well as over all the habitable parts of Europe. Between the close of the exclusively palæolithic period in Western Europe, and the first introduction of bronze there must have intervened a very long period, perhaps to be measured in thousands of years. We are able to subdivide this great area of time to a certain extent, but we have as yet attained no approximation whatever to the dates of these divisions.

The earliest neolithic remains in Europe are those found in the so-called kitchen-middens or rubbish heaps formed around the dwellings of the coastwise eaters of shell-fish. Denmark is the classical ground of the middens. There they have been found in

greatest extension, and excavated with most completeness. Neolithic Portuguese middens, formed by people of the Cro-Magnon race, have likewise been the subject of accurate investigation. Middens have also been found in Ireland, Sardinia, and France, as well as in Asia, Japan, and North and South America. The midden period in Europe is chronologically an early one. The implements found are of a backward character, and the domestic animals represented are few. The midden folk made little pottery, and that of the feeblest kind. They practised the same burial customs as the later palæolithic people.

We now pass from the neolithic dwellers on the sea-coast to the lake-dwellers. Lake-dwellings were apparently communistic villages; they were built on platforms (supported on multitudes of piles) just above the surface of a lake. Such villages continued to be inhabited down to historic times. There were many of them in Ireland, but it is in Switzerland that the most important early examples have been found. The earliest known were in the lakes of East Switzerland; remains of these yield only small axes made of rocks from the neighbourhood, and hardly to be called polished. Their pottery is of the poorest, and unornamented. Their implements of bone and the like are feebly fashioned. The later dwellings yield fine and well-polished axes, sometimes with a hole for a handle,

and in many cases formed out of jadite and other hard imported stones. The hand-made pottery found with these is of more elaborate form and better work-manship; there are handles for the attachment of a suspending cord, and the surface is decorated with simple patterns of lines, triangles, and so forth. In the latest lake-dwellings bronze and even iron has taken the place of the more important stone implements.

The bulk of the neolithic peoples, of course, lived neither on lakes nor by the sea-shore, but spread abroad over the more fertile parts of the land. Their chief employment was not hunting, but pasturing cattle and tilling the ground. The majority of the population therefore dwelt in the open country rather than in the midst of forests, which stone axes, however good, could not avail to clear. It was these pastoral and agricultural country folk who raised the great stone monuments to which we must presently refer. Moreover, in the earliest neolithic stage they formed enclosures, surrounded by earthen mounds and ditches, as at Peu-Richard, near Thenac (Charente-Inf.), and other sites in the Vosges. These enclosures look like fortified camps, but it seems probable that they served no military purpose. They may have had some religious use.

The ordinary neolithic house was a circular hole in the ground, roofed over conically with wood or thatch, and covered with a mound of earth. Sometimes a number of these circular chambers were connected together by passages, and thus perhaps formed into a communistic settlement. Innumerable traces of such pit-dwellings have been found in dry upland places in England. They are probably to be considered as a development of the tent rather than of the cave. A fire was made in the midst of the floor, and the smoke escaped through the entrance passage or some hole in the roof. Such simple abodes or circular huts of the same form, built on instead of sunk into the ground, were the habitations of the common folk, in England at any rate, down to the time of Romans, and possibly even later.

The palæolithic huntsman, in the intervals of the chase, or when the fish would not bite, was a man of leisure. He had no crops to look after, no cattle to tend, nothing to do. The unsavoury rubbish-heaps that surrounded his dwelling were full of fine antlers and well-scraped bones. What more natural than that, being by nature a person of artistic impulse, he should have picked up one of his pointed flint implements and fallen to engraving with it for the mere pleasurable filling of the time, just as the Swiss peasantry to-day take to wood-carving when the winter's snow deprives them of their out-door occupations? But (neolithic man was a farmer and a

shepherd, a weaver, a potter, and all manner of things besides. At all times of the day or night there was something for him to do. He had no more time nor inclination for art than has a modern English mechanic. With the exception of a rude kind of architecture and possible arts of singing and personal adornment, the neolithic man practised no arts. | In France and all other countries to which our present knowledge extends there is no trace of a continuance of the art-traditions of the palæolithic French race. No doubt these traditions were somewhere continued, but the continuity can as yet be in no wise traced. At all events they were neither appropriated by the incoming neolithics, nor were they carried on by those surviving remnants of the Cro-Magnon race whose skeletons have been found in parts of France and the Iberian peninsula, where they were buried in characteristically neolithic fashion. The neolithic potters did indeed make use of simple linear, zigzag, triangular, and other incisions to decorate the rough black or brown surfaces of their hand-made and usually round-bottomed pottery; but the very simplicity and rudeness of this decoration appear to indicate a fresh start and the absence of artistic traditions.

Some megalithic edifices and artificial grottos in France retain a few simple mural decorations

which tell the same tale. There is obviously no long artistic tradition behind them. In certain of the sepulchral grottos of the Marne, and several dolmens in Normandy and Provence, there is carved on the wall to the left of the entrance, or in the ante-chamber, likewise on the left, a relief intended to represent a female figure. No art could possibly be more primitive. The figure is little more than a diagram, and it is only by comparing one with another that we discover the intended signification. some kind of earth or war goddess or divinity of the lower world was symbolised by these rude images.1 She is often accompanied by the representation, in painted relief, of a polished stone axe, mounted in a wooden handle, and such axes are likewise carved in other parts of the sepulchral chambers. The likenesses of polished stone axes of various known types have been found engraved on the walls of many other neolithic funerary monuments. They are now and again accompanied by a cartouche or shield-shaped outline containing mysterious figures which may have had some hieroglyphic significance.2

¹ Mr Doughty found in Central Arabia certain inscribed steles, surmounted by a rough semblance of a human face, that immediately recall the rock-cut steles in the Marne grottos.

² The circles apparently represent the female bosom; the horseshoe forms may be abbreviated representations of the impress of a thumb. A pair of circles would signify a woman or goddess, a pair of thumbs a man.

Several pairs of footprints, carved in relief, like those ascribed to Buddha or Mohammed, have also been discovered. Finally, the walls of some megalithic monuments retain a remarkable rippled decoration, just like a series of magnified impressions of the lines on the skin of the human thumb, such as the surface of hand-made pottery would naturally bear.

The neolithics, backward as they were in all the decorative and imitative arts, nevertheless contributed an important element to artistic evolution. appear to have been the first builders, and the royal art of architecture takes its origin from them.) All their monuments which have come down to our days are probably of a funerary nature, and to these we must now turn. The midden folk, as we have seen, appear to have retained the burial customs of the later palæolithics. They deposited the unfleshed skeletons of their friends in an attitude of repose just below the surface of the ground in the immediate proximity of their abodes. Elsewhere the skeletons. cleaned of flesh, were collected together in a cave. In the Duruthy Cave (Landes) no less than thirty-three skeletons, all of the Cro-Magnon type, were gathered together. Where natural caves were not to be had, artificial ones were constructed. These were either excavated out of rock, if there was in the neighbourhood any soft enough to yield to neolithic tools;

otherwise they were built upon the surface of the Artificial grottos, of neolithic date, have been found in many parts of France, especially in La Marne and the surrounding districts. The most important series are cut out of chalk strata in the sides of the Petit-Morin valley. All of them are entered by a horizontal passage leading to some kind of a doorway and a chamber. The grottos that contain many skeletons are usually roughly made; those of better workmanship contain but few skeletons, and the walls and floors of their entrance-passages give evidence of having been much traversed, doubtless by neolithic visitors coming to bring offerings to the tombs of important men or royal personages. Some of these grottos comprise also an ante-chamber and descending passages leading to it from outside, and from it to the inner chamber. There are traces of a door-frame at the chamber entrance, and of the bar that kept the door closed. The skeletons were laid upon flat stones, and sometimes it is clear that the bodies were burnt. Cases of incineration are, however, relatively rare. Burning would be merely a rapid process for unfleshing the skeleton. When the bodies were burnt, so were the axes which were dedicated to them, and thus passed through the fire into the world of ghosts. The same result was attained by breaking an axe into pieces, and some of the most precious examples have

been found thus sacrificed. The ante-chamber, with the figure of the goddess carved upon its wall and the bones of the great dead near at hand, was doubtless the sepulchral chapel, and corresponded to the accessible chamber of an ancient Egyptian tomb. What its furniture, if any, may have been we cannot say. The private chamber of the dead was supplied with many objects intended to be useful to the ghost. Different tombs have yielded ornaments of various kinds, all manner of weapons, pottery once filled with offerings of food, and the like matters. The later we descend in point of time, the more numerous and varied are the objects dedicated in tombs.

The built stone monuments of the neolithic period in Europe are scattered over France, Spain, the British Islands, Denmark, Scandinavia, and the Baltic coasts. Broadly speaking, they are more numerous in the neighbourhood of the sea than inland. They consist, like the grottos, of a passage leading to a chamber. Sometimes the chamber is not distinguishable from the passage, and sometimes a single passage leads to several chambers, arranged on every variety of plan. Burials are made alike in the chamber and the passage. The whole was often covered with a great mound or tumulus of earth. Whether every dolmen was originally the mere core of a tumulus, and whether every tumulus once contained a chamber

within it, are questions not answered by all students in the same way. There is no line of division separating the dolmens of the Stone Age from those built after the introduction of bronze; and it has not yet been found possible to arrange existing dolmens in any chronological sequence nor to trace the development of the type. Differences may be as often due to local variation as to chronological distribution. It seems scarcely possible to doubt that a dolmen was in the first instance an imitation cave. The simplest form of dolmen consists of a large roof-stone supported on three monolith walls. To erect even a moderate-sized monument of the kind involved the moving of large masses of rock. This could not be done till men had learnt to co-operate together to that end. Observation of backward races and of the most ancient existing monuments, as well as the inherent probabilities of the case, lead us to conclude that shouting or singing all together was the means by which rhythmic and simultaneous action was attained by early man. Song, if this be true, preceded stone-building, and was essential to the growth of architecture. The songs of Orpheus that moved the rocks were the rhythmic cries guiding the tuggings of neolithic man.

Some neolithic grottos have been found, as at Mizy (Marne), which were dug out of the ground

underneath great masses of rock lying on the surface of the soil. The walls in such cases are lined with rough polygonal masonry. It would be extremely interesting to know whether grottos, excavated in the earth under huge boulders and lined with rough masonry of unwrought stones, were made at an earlier time than megalithic dolmens. Did stone architecture arise from megalithic imitation caves, or were those merely a more sumptuous form of tumulus-cavern; and are chambers lined with walls of builded stones the prototype of the others?

If a dolmen was an imitation cave, a neolithic pit dwelling was the prototype of the tumulus. Passagetombs, lined with rough stones, bear a close resemblance to pit-dwellings. They developed on the shores of the Ægean into such sepulchres as covered the remains of the chieftains of Mycenæ. In Egypt the tumulus cased with or built of stone eventually grew into the giant proportions of the pyramids of the kings; whilst the mastaba, the ordinary form of tomb of the upper-class Egyptians of the same age, appears to have been a direct imitation in stone of the small mud-houses of the natives of the Nile valley before the first great development of Egyptian civilisation. The rock-cut tombs of Egypt likewise preserved to a late date the traditions of the longforgotten days when men dwelt in caves. Thus it

has happened in many parts of the world that the tomb, the house of the ghost, has preserved the form of the normal dwelling-place of an earlier stage of civilisation. The Stupas and Dagobas of Buddhist India are only formalised and magnified tumuli, whilst the Tee that crowned them may have found its prototype in a dolmen.

We cannot pass without mention the numerous single upright stones or menhirs, found in so many parts of the world, and some of which at any rate were erected in the neolithic stage of civilisation. There is little to say about them. They were set up for a variety of reasons. Some marked boundaries, some commemorated events, some had a phallic significance, some were monuments to the dead. They were chiefly interesting because the tradition of their use was continued into historic times and amongst highly developed peoples. The Semitic races reverenced Bethels as the symbols of their gods, and the niche within which such a stone was at a later time carved (as near the Nabatean temple at Medáin Sâlih) was the original of the mihrab of all Moslem places of worship. The obelisks of Egypt, whose earliest examples have recently been found by Mr. Petrie within the temple of Snefru's pyramid at Medûm, must have derived their origin from neolithic menhirs. Babylonia and Assyria

are not without corresponding examples; whilst the inscribed and uninscribed columns set up by Asoka, and other ancient Indian kings, descend from similar parentage. Backward races, even down to the present day, continue to set up *menhirs* scarcely distinguishable from the most ancient examples.

Cromlechs, or circles and avenues of upright stones, are likewise still erected by semi-savage races as they were by the neolithic and bronze-using people of Western Europe. They do not appear to possess any universal meaning. Some are sepulchral monuments, some are set up to commemorate events, or treaties, or important legislative enactments. They are not peculiar to any single race. Apparently those in Brittany belong to an earlier period than those in the Pyrenees. There are many of them in England and many more have been utterly destroyed. In an example like Stonehenge this type may be said to have attained its culmination, and almost to have entered into the domain of art. The problems connected with the date and uses of that monument are however unsolved, and may not admit of solution. Cromlechs did not develop in the hands of civilised man, and were not the germ of any architectural type. The connection which some have desired to establish between stone circles and Buddhist railings is one that will not stand examination.

There is, however, an element, included in many cromlechs, and sometimes found alone, which may well enough have been an important step in architectural evolution. I refer to the trilithons-two monolith piers set up on end with a stone beam laid across them. Examples of this type, of various uncertain dates, are found in different parts of the world. Now the earliest buildings of shaped stones, belonging to historic times, those, namely, of the fourth Egyptian dynasty, consist of an agglomeration of such trilithons forming walls and roof by their conjunction. Stonehenge may not be so ancient as the temples of the Memphite pyramids, but it is an example of an earlier stage of architecture. Its existence suggests that, already in neolithic times, men may have so far learnt the craft of shaping and raising great masses of stone as to be able to set up trilithons of the same type as those still standing on Salisbury Plain. From such trilithons, roughly shaped with stone implements, to a building like the so-called Temple of the Sphinx, the transition is natural and easy; but it was a transition that could only be accomplished by people armed with better tools than any that can be made out of stone.

The invention of bronze was, in fact, the turningpoint in the history not only of architecture, but of all civilisation. Bronze gradually modified, but did not suddenly revolutionise the world. There is no hard and fast line to be drawn between the neolithic and the metal-using stages of human development. The one gradually merged into the other at different dates in different localities. The races which by commerce obtained possession of metal nevertheless continued to use stone for their commoner tools for thousands of years. Bronze was employed by the builders of the pyramids of Egypt, but the fellahin in the time of Ramses II. still reaped with stone-edged sickles. / It was the introduction of metal tools that first made architecture possible. Neolithic man built in earth, in wood, and in rough stone, but none of his buildings can properly be described as works of art. Apparently, as we shall see, the origin and spread of writing followed the routes taken by bronze. It is obvious that the possession of metal tools must have made possible an increase in the conveniences and refinements of life, thus reacting favourably upon the senses of man, and helping to refine his tastes. Neither writing, nor sculpture, nor fine dressing of stones for building, nor painting upon prepared surfaces need be looked for till after the discovery of metals.

The Neolithics with their stone axes were not able to clear the forest lands. Those of them who were hunters or fishermen might live in forests, but the bulk of the pastoral and agricultural folk had to seek the open places of the world. The most highly developed of the pastoral and agricultural Neolithics did in fact flourish, as their existing remains prove, in the open uplands. But when man was armed with iron or bronze he was able to occupy and clear the rich and pleasant places of the earth, where vegetation grows freely, and the impediments to the advance of material civilisation are reduced. Such pleasant and fertile places were the great river-basins and deltas, and especially those of the Nile, the Tigris and Euphrates, the Yangtsekyang, and so forth. (Those places possessed in greatest profusion the natural resources which could be readily developed by men armed with metal tools. They therefore became the centres of the important civilisations based upon the use of metal, just as in our own day the great coal regions have been the main centres of the new civilisation which the age of steam has brought to the birth. It was the invention of bronze and the, perhaps almost contemporary, discovery of iron that made possible the earliest historic civilisations, from which the civilisations of the present day have come down by unbroken descent.

There seems to be little doubt that iron was discovered and worked in rudimentary fashion at a very early period both in Asia and in Africa. But though

iron was known as soon, perhaps, as bronze, it did not become a great factor in civilisation till a comparatively late date. (Bronze was the active civilising agent in antiquity.) The cardinal fact, therefore, which archæology has to determine is the position in time and place of the invention of this potent alloy of copper and tin. Where and when was bronze invented? It is to considerations tending to throw light upon this problem that we must next turn our attention.

CHAPTER III.

THE INVENTION OF BRONZE.

THE part of North Africa through which the Nile flows is known to have been inhabited by people in the palæolithic stage of development. General Pitt-Rivers 1 found flint implements of palæolithic form imbedded in deposits dating from a time when climatic conditions reigned other than those which have prevailed in Egypt for at least 6000 years. Mr. Petrie also picked up a water-rolled implement of palæolithic form on the hills behind Edfu; and similar discoveries have been made at different times. We know nothing about the transition from palæolithic to neolithic conditions in the Nile valley; but polished stone implements have been found, doubtless the jetsam of neolithic fish-eating folk settled at points on the river-side. These people were probably akin to some existing African tribes, but we must await further

¹ Journal of the Anthropological Institute, Feb. and May 1879, and May 1882.

information before we can attain certainty about this matter. On the rocks near Silsilis and at El Qab and other places, both in Egypt and apparently also in Arabia, there may be seen many graffiti of boats, ostriches, giraffes, and other animals, some of which do not, and under existing conditions could not, live wild in the Egypt of to-day. These graffiti were doubtless scratched, where we still see them, by the neolithic Egyptians; and it is worth notice, as pointed out by Professor Sayce, that they resemble in design the simple artistic product of the modern Bosjesmans of South Africa.

We have good reason to conclude that the mass of the united Egyptian race was formed by the concentration of a number of related totem-tribes or kindreds, such as the cats, the jackals, the serpents, the crocodiles, and so forth. These tribes, in process of time, became welded together, and their totems were thus associated with gods of a more or less local character. By means of civil war, and the resulting dominion of first one locality then another over all the rest, many of the local gods became elevated for a time, in their turn, into the position of supreme deity of the land. Thus by degrees a national pantheon was formed, and ultimately an esoteric Monotheism was evolved out of that. This is the lesson which we learn from the religion of the

ancient Egyptians when examined by aid of modern comparative methods. It may be concluded that the prehistoric totem-tribes were the people who made the *graffiti*, and lost the polished stone implements which modern discoverers have found.

As every individual is the child of two parents, so is every advance in civilisation the offspring of mixed influences. The progressive races have always been mixed. An isolated tribe remains stationary. It is where tribes of different tendency and varied capacity come in contact that new ideals arise and new civilisations are created. We are not referring to the mixture of blood which sometimes produces good and sometimes evil results, but to the contact, often hostile, of peoples of different tendency. The continued contact between the Celtic and Teutonic spirits, for instance, has been the parent of modern European civilisation. The contact between East and West has always been the prolific source of the advancement of humanity. That contact is now maintained by elaborate media of communication and commerce. At the dawn of history, it was only when men were actually adjacent that they could so influence one another. The first great civilisations, therefore, arose at places on the margin of contact between the most advanced peoples of the great continents-between the peoples of Asia and

Mediterranean Europe in the Euphrates valley, and between the peoples of North Africa and Asia in the Nile valley. This is the cardinal fact that we have Broadly speaking, we may say to bear in mind. that the greatest civilisations are those which inherit from the largest number of fine ancestors, and thus unite the richest variety of tendencies and ideals. The greatness of Greece in the ancient world was, as we shall see, due to the fact that she inherited the traditions in almost equal measure of all the great races that had preceded her upon earth, so that we are not able to point either to Egypt, or to Assyria, or to Babylon or Phœnicia, and call Greece the continuation of this one or that, but we are forced to admit that she united the heritage of all, and numbered all amongst her nearer or more remote ancestry.

The neolithic totem-tribes of Egypt were only one of the parents of Egyptian civilisation; the other parent was undoubtedly Asiatic. The Egyptian race, in historic times, was never a pure race. It contained African elements and Asiatic elements, and these elements varied in proportion at different periods. The Egyptian language would alone suffice to prove this statement. According to one theory, which I am not concerned either to uphold or to refute, the most ancient known intellectual and governing class

in Egypt was a white race, akin to that of the contemporary corresponding class in Chaldea, and this white race was of Asiatic extraction, and ultimately became merged into the general mass of the Egyptian people. But the two facts upon which I do insist are, that in prehistoric times an Asiatic element was introduced both into the population and civilisation of Egypt, and that it was out of the union of the Asiatic and African factors that the historic civilisation of the country arose.

The Pharaohs of the period of Egypt's culmination continued to wear, beneath all their robes of state, the semblance of the simple sporran and lion's tail which had formed all the covering of prehistoric Egyptian chiefs. This is a small but significant example of the conservatism of Egypt, whereby she progressed, not by supplanting one custom by another, but by enveloping the old in the new. Owing to this remarkable and almost unique quality, it will doubtless be possible for duly equipped specialists ultimately to reconstruct the main outlines of prehistoric Egyptian civilisation out of their fossilised remains imbedded in historic epochs. Such fossils are totemism, certain fundamental architectural forms, some superstitious uses of flint implements, the titles of gods and kings, objects represented in the sacred writing, and many the like elements that might be

catalogued if it were worth while. The question now arises, What part of the early civilisation of Egypt was of Asiatic origin? I answer, All that depended upon the use of bronze.

For the sake of clearness in exposition, I shall assume at the outset the truth of this theory, rather than attempt to deduce it as a conclusion. Iron may have been and probably was discovered in Africa at a remote period. Fragments of iron have been found in the Great Pyramid. It is depicted in the most ancient hieroglyphics. Travellers tell us that, over large areas in Africa, iron lies on the surface of the ground in a form very easily reduced, and that the natives know how to fashion objects out of it by simple processes. But tools thus made are inferior to the tools of excellently tempered bronze which were fashioned in prehistoric periods. To make iron into tools, as tough and bearing as sharp an edge as those made of bronze, requires a high degree of knowledge and skill. Iron, therefore, even if known to the prehistoric Africans, did not raise them above the level to which polished stone could bring them.

Bronze is an alloy of copper and tin. Copper is a common metal, found almost pure in many parts of the world; tin is very rare. Accomplished miners, like the Phœnicians and Etruscans, doubtless discovered it in many places. We know from the Telel-Amarna tablets that bronze was imported into Egypt from northern Syria in the time of the eighteenth dynasty. We know, too, that in ancient days tin was found in the Caucasus and in Khorassan and other Central Asian sites. It was also found in Cornwall, but only in the later period of antiquity. All these places, no doubt, became centres of the bronze industry, but none of them satisfies the demands of the home of the invention of bronze. -There is only one district in the unsubmerged regions of the world where tin exists in exhaustless quantity and easily accessible. This is the Malay peninsula and archipelago. Whether during the period of human existence upon the surface of the earth there has ever been a larger area of land above the surface of the sea in those parts, we cannot say. The lost Eden, which General Gordon imagined to lie beneath the surface of the Southern Ocean, might then have been a continuation of this tin-bearing district, and the place of the discovery of bronze. However this may be, all known indications as to the locality of the discovery point somewhere in that direction. a vaguely defined margin of the distant East rose the morning star of civilisation, which, shining at first but dimly across the sea, appeared to the people of the Euphrates and the Nile, and heralded the new day.

The oldest Egyptian traditions are not opposed to this theory. They point to the sacred land of Punt as the place whence their earliest civilisation was derived. Punt was approached from Egypt by ships going down the Red Sea, and may have been a name of varying significance, like Tarshish to the Phœnicians. The south of Arabia, which archæologists are now revealing to us as the land of an ancient civilisation, and the opposite Somali coast would both come under the designation of Punt. In early times Aryan Indians traded by sea with the Gulf of Arabia, and called, in their own tongue, the island Socotra by the name Dvîpa Sukhatara, or the Happy Island. The sea voyage from Aryavarta to the mouth of the Red Sea is not likely to have been first undertaken by a people of inland origin, and we may well regard it as a route established in far earlier times. Thus the term Punt may have included more distant countries than the coasts of the Gulf of Arabia, or at any rate those coasts were probably a haltingplace at which the products and traditions of the distant East paused a while on their westward flight.

It is true that the earliest known Egyptian monuments stand in the neighbourhood of Memphis near the root of the Nilotic Delta; still both tradition and the inherent probabilities of the case indicate that Egyptian civilisation did not originate there, but descended from a point higher up the river. Throughout all the time of the ancient empire, though the great buildings and tombs were in the north, we hear but little about Lower Egypt; it was Upper Egypt that played the principal rôle. Not until quite late historic times was the whole area of the Delta cleared, drained, irrigated, colonised, and thus raised to be the most important part of the empire. Egypt was a riverine State, and owed its unity, its stability, and its wealth to that fact. From a number of separate tribes and independent chieftains, represented by the Nomes and nobles of a later day, the upper and lower countries separately developed into kingdoms of somewhat different internal structure. The pious Egyptians, during all the long period when the lordship of the two Egypts was an imperial, or at least an independent power, never obliterated from the constitution of their country the traces of these prehistoric conditions. The union of the two kingdoms was a personal union, and resulted from the office of monarch being filled in both countries by one man. The two countries were not amalgamated into one; they were merely united under a single monarch.

The moment of the union was a momentous one, for from it traditional Egyptian history commences. The Egyptians themselves believed that the monarch of the upper country, whose capital was Tine (Thinis),

obtained possession also of the lower kingdom, and thereupon moved his abode northwards and founded the new capital of the united kingdoms at Memphis, on the confines of both. We have thus far, however, searched in vain for any traces of the kings belonging to the first three dynasties of the united empire. But at the close of the third dynasty we are suddenly confronted with the perfectly historical monarch, Snefru. We possess his tomb in the pyramid of Medûm, and the tombs of his courtiers in the surrounding mastabas. His effigy and the record of his victorious campaigns are carved upon the rocks of the Wady Maghara. The sculptured portraits of his contemporaries adorn the museum of Gizeh. Thus. we pass out of the world of conjectures and possibilities into a region of visible fact. Nothing is more astounding, nothing more inexplicable than this sudden emergence of the ancient life of Egypt from the haze of indefinite tradition into a monumental and tangible reality. It comes unheralded and without preliminary stages. It seems to spring into existence complete. All the main conventions of Egyptian art are manifested in its earliest works. The hieroglyphic writing is there in a form elaborated and complete. The deep mystery in which this phenomenon is shrouded can only be elucidated by future discoveries.

What remains of the pyramid of Medûm is one of the finest conceivable pieces of masonry. Its stones are so beautifully squared and adjusted that after 6000 years they fit together closely enough to deceive superficial travellers into the belief that the whole is quarried in one piece out of the living rock. The pyramids of Gizeh, built by generations immediately succeeding Snefru, are the vastest piles of dressed stone, perfect in workmanship, that the world contains. The men who built these things can scarcely have been the inventors of masonry. Where are the preliminary stages of their craft to be observed? In the whole length of Egypt we have not found one stone upon another, not a rock-cut grotto, not a wrought fragment of any material whatsoever, to which it is possible to assign an earlier date than that of the perfect structures and sculptures of the time of Snefru. And yet the soil of Egypt destroys nothing that is committed to its keeping, and that soil, at all events in the Memphite neighbourhood, has been explored with a thoroughness that has nowhere else been approached. May be the tombs and buildings of the earlier Memphite kings were made of mud-brick, but even so, when the mud-brick mastabas of Snefru's contemporaries have been preserved, though rifled and utterly neglected, why has not a single scrap of earlier work survived? Moreover, if all earlier monuments

were of mud-brick, the mystery of the origin of stone-building remains unclucidated.

A more thorough search in Upper Egypt may yet, perhaps, avail to explain the enigma. Tine, its capital, was the ancient predecessor of the sacred city of Abut (Abydos). It lay in the midst of an exceptionally broad fertile tract between the river and the bordering mountains of the west. But far more important to it was the neighbourhood of Kobte (Koptos), for from that point on the Nile a relatively short and fairly watered caravan route (known to have been used in the most remote times) leads to Kosseir, on the Red Sea. It was to the command of this caravan route that the greatness, first of Tine, and afterwards of Thebes, was due. Tradition, no doubt rightly, asserted that the goddess Hathor (worshipped at Denderah, close to Kobte) and the god Amen of Thebes were brought to Egypt from Punt. If Punt was the sacred land to Upper Egypt in the same sense that Abut was the sacred city to the whole land—that is to say, if the civilisation which Tine gave to Memphis came to it, broadly speaking, from Punt -then it is not in Egypt that we need look for those preliminary stages of the arts and crafts, no trace of which has the most minute inspection yet availed to discover. This line of reasoning would suggest the conclusion that the characteristic features of the

earliest Egyptian civilisation were derived from influences imported from the East by way of the Red Sea and the Wady Hammámát. If this be true, we shall be forced to abandon the usually received theory according to which the Isthmus of Suez was the route whereby civilised people and influences entered Egypt.

Mr. Petrie's investigations in the Medûm cemetery in the spring of 1891, as yet only briefly reported, have brought us for the first time face to face with the mixed races of ancient Egypt. Nothing is more characteristic of races than their method of burying the dead. Amongst the neolithic and sometimes amongst the palæolithic peoples of Europe skeletons were generally crouched upon their sides with the knees up to the chin. 'Hitherto,' writes Mr. Petrie, 'we have always found Egyptians buried full length; but most of these earlier bodies (at Medûm) are crouched, many with the knees up to the chin. And I am told that many crouched bodies in large earthen jars were found lately at Gizeh, but were all destroyed. These bodies are always on the left side, with the face east, head north. This proves that a special idea was connected with such burials. But no funereal vessels or head-rests are found with these interments; only around the body are sometimes a few scraps of charcoal, as if it had

been surrounded by live coals at the time of burial. At the same period full-length burial was practised, accompanied by funereal vessels of diorite and alabaster and head-rests. This distinction seems to be connected with the two races—the aborigines and the conquerors, who were not yet fused together.'

We have spoken of the remarkable excellence of the masonry of the earliest known Egyptian building in stone, but this masonry is not architecture. Neither the great pyramids nor the temples belongto them possessed, so far as we can gather from their ruins, any architectural qualities. Stone architecture, as will hereafter be shown, did not arise in Egypt till the sixth dynasty. The only architecture, the only artistic building, under the fourth dynasty was This is remarkable, because in Egypt during all the historic and a long prehistoric period timber has been scarce. The stem of the palm-tree is valueless for purposes of joinery. Wood for building must have been an imported commodity. Nevertheless the existence of wood architecture of an elaborate kind in the time of the ancient empire does not admit of doubt. Many an old sarcophagus is dexterously carved in the likeness of the kind of house its owner dwelt in, and still more numerous upon the walls of tomb-chambers are the representations, done in painting or low relief, of pavilions and other

wooden structures, carved and put together with much decorative elaboration. Moreover, we are able to summon the evidence of hieroglyphics on this point. Mr. Petrie, who made an exhaustive study of the most ancient series of hieroglyphic inscriptions, those namely in the Medûm cemetery, pointed out that the sign read $\bar{a}a$ (great) is the representation of the papyrus compounded as a column, with a tenon on the top in the form of an inverted bell-in fact, a column of the same type as the ugly bell-capped columns of the eighteenth dynasty at Karnak. has also shown that the same kind of support is represented as sustaining the roof of the building in the hieroglyphic heb. In both cases, however, the column is obviously made of wood and not stone. The way in which the tenon of the column is mortised into the curved roof-beam is clearly indicated in heb. We shall hereafter find that the hieroglyphics have preserved for us likenesses of the light village shrines of very early days; and it is probable that a careful study of the best early inscriptions would yield further valuable results. As yet, however, I have discovered no trace of any prehistoric stone building. Every indication points to wood and earth as the only building materials employed at the time when hieroglyphic writing was reduced to the earliest form in which we possess it.

Mud is the natural building material of the country, and is universally employed in the Nile valley at the present day, except where European influence extends. An unskilled labourer can puddle and shape some thousand or more large crude bricks in a day, and a short exposure to the Egyptian sun renders them hard enough for building purposes. The wet mud serves for mortar, and so a man can build his own house with little toil. The prehistoric inhabitants of Egypt, the fertile parts of Arabia, and the Tigris and Euphrates plains made their habitations in this way. A domestic architecture of stone might have arisen in Egypt, but neither there, nor in the neighbouring parts of Asia, was it possible for an elaborate wood-architecture to have been invented and developed. We must look elsewhere for the origin of that. Leaving out of consideration all merely undecorated wood-buildings-the lakedwellings of Europe, for instance, which may well have had an independent origin, and such wooden huts as the Central Asian and the Mediterranean peoples doubtless employed—it is only in Asia, and especially the southern and warmer parts of Asia, that wood has always been the normal material employed in decorative building. The stone-architecture of India and the East generally has never been anything but a mimicry of wood. Rough log

huts could doubtless be fashioned with stone implements, but wood-architecture implies the preliminary invention of bronze. In Egypt it was, of course, only employed in the service of the governing class. I conclude, therefore, that the traditions of elaborate wood-architecture, the existence of which in Egypt at remote times is proved by such ancient evidence, were brought to that country by the bronze-using immigrants, and that, wherever those immigrants themselves may have come from, the architectural traditions they brought came, ultimately, not from the steppes and highlands of Central Asia, but from the hot and luxurious countries or islands of the south.

The oldest examples of Egyptian sculpture are likewise instinct with traditions that must have originated when wood was the sculptor's material. Some of the best of them are actually carved in wood, and carved in greater perfection than was ever attained in wood-sculpture in later stages of Egyptian art. The beautifully decorated panels from the tomb of Hosi, to which no later parallel has been discovered, are of special interest in this connection. It must, however, be borne in mind, in the case of sculpture and architecture and all other products of Egyptian civilisation, that, whencesoever the tools, materials, and traditions of workmanship may have been derived, the ideal expressed by them arose in Egypt



out of the very soil. This ideal of persistence and power in calm and dignified repose was produced by the reaction upon the inhabitants of the Nile valley of the physical circumstances of their surroundings. It came from no other part of the world, and could not be transmitted elsewhere. During its reign great works were produced in its service, the like of which can never again be made. In its pursuit the people of Egypt accomplished the work that was given them to do, discovering and developing those crafts and learnings which were transmissible, and which in due course the Greeks, inheriting, mingled with their other inheritance, and by the sum of all at length availed to enshrine in visible form that ideal of perfect beauty and perfect taste which it was theirs to manifest to a wondering world.

But there was another country besides Egypt where the introduction of bronze generated a notable, and, in its early stages, probably an independent civilisation. When History sheds her earliest beam of light upon the inhabitants of the alluvial plains, through which Tigris and Euphrates pass into the Persian Gulf, she discloses to us a civilisation at once complex and old. The year 3800 B.C., when Sargon I. was king in Chaldea, was by no means the date of the dawn of Chaldean civilisation. Behind that remote epoch there lay a long past of laborious

development, the result of the co-operation of at least three different peoples. It is not likely that we shall soon be able to trace back the line of this development, or to unravel its threads. Chaldea is not like Egypt. Its climate does not resemble the dry airs of the valley of the Nile. It is not a country of It is not everywhere approached by clean and changeless desert, safe recipient and preserver of countless records of the past. The Egypt of the the Ancient Empire is with us to-day, and astounds us by the magnitude of its works; but contemporary Chaldea has long ago been swallowed up within the destroying jaws of time, and we must consider ourselves fortunate if we can painfully gather together the smallest remnants or the most trifling examples of the works of the ancient people of that land.

Civilisation was not earlier born in Egypt than in Chaldea. It is better to regard the civilisations of the two countries as twin sisters, sprung from a common origin, and constantly influencing one another as they grew up. The parent of both was, I maintain, that ancient bronze-using people, the inventors of writing, who dwelt in a warm-wooded region somewhere in the south of Asia, and who came into Egypt by way of the Red Sea and the valley of Hammámát. A strong and advancing race, as before has been remarked, results from a mixture

of peoples, just as an advancing civilisation springs from a mixture of ideals. When an isolated tribe dwelling in one locality and climate, and possessing one set of ideas, mixes, or is brought closely in contact with another folk and another set of ideas, a higher civilisation often arises at the point of contact. The great civilisations have always arisen in the meeting-places of ideas.

It is important to notice that the situation of Chaldea was one favourable to the growth of a mixed race and civilisation. Its fertile plains, the very garden of the world, were bordered by the highlands of Elam on the north-east, and by the deserts of Arabia on the south-west. It was traversed by two great rivers, the natural highways between the seafaring peoples of the Indian Ocean, and those of the Mediterranean. We should naturally expect Elam to have been the home of a tolerably advanced neolithic people; and we do, in fact, find there historic traces (dating back to about 3000 B.C.) of an ancient Elamite civilisation diverse in its origins from the Chaldean. Many indications unite to prove that an Elamite factor went to the composition of the population, the languages, and the civilisation of Chaldea. The deserts and fertile highlands of Arabia, again, were the home of tribes of Semitic nomads. In other countries these people

developed an advanced civilisation, but as long as they remained in their deserts, or in the isolated central plateau of Arabia, they must have closely resembled the Bedawin and Nejdeans of to-day. Now, the conditions of their life, and the small resources of the desert, prevent the Bedawin from developing any material civilisation or any of the formative arts; but, on the other hand, these same conditions have shown themselves favourable to the growth of language and of a noble poetic diction. astonishing brilliancy of the glories which night displays to dwellers in the desert has ever attracted their attention to the heavenly bodies; and no people has been environed by circumstances more conducive to the birth of deep religious emotion. The poetry, religion, science, and language of Chaldea gathered an important contribution from that part of the settled population of the country which emigrated from Arabian homes.

Finally, we must take note of an important and ancient tradition, which points to the sea as the way whereby writing, laws, and a part at least of the religion came into the country. Oannes, the fish-god, brought them. The myth no doubt hides a chapter of world-history. From the earliest times the Chaldeans were seafarers. They circumnavigated Arabia to the Sinaitic peninsula at a remote historic period.

Originally the seamen were of a different race from the agricultural population. It is to them, either as mere carriers or as immigrants, that the bringing in of writing, and probably also of bronze, is to be referred.

The style of writing which we associate with the peoples of Chaldea and Assyria is that known as It ultimately came to consist of elaborate cuneiform. sets of combinations of wedges. The majority of the inscriptions we possess in this kind of script are impressed upon slabs of clay, which have been hardened by baking. The conclusion would be obvious, even if we had no proof of its truth, that the wedgeforms were developed to suit the material in which the writing was impressed. The wedges are, in fact, the impressions of the right-angled corner of a quadrilateral prism of wood. The wedge-shaped letters, out of which all later inscriptions carved in stone are composed, are copies of the normal forms of the writing as developed in the employment of the materials ordinarily used. Now if this writing had been invented in Chaldea (a country lacking in wood), the earliest form of it would have been of the kind dictated by the requirements of clay tablets. But such is not the case. The earliest inscriptions are composed of linear and not wedge-shaped forms. We must therefore look to some other country than Chaldea as the place of their invention.

Further, it is clear that many of these earliest linear groups are abbreviated forms derived from the likenesses of the objects whose names they, in the first instance, represent. In fact, behind the oldest Chaldean writing, as we find it in an inscription of 3800 B.C., there lies a developed system of hieroglyphics. Unfortunately we cannot as yet identify many of these hieroglyphics. The sun, a fish, a doorway, and a few more can be identified, but the likeness to any object has in most cases utterly disappeared. The hieroglyphics of Egypt do not throw much light upon the matter, but it seems clear that the oldest Chaldean writing is not a linear form of Egyptian writing, and was not in any way derived from Egypt. The two may have been derived from a common source. The Egyptians, with their conservative instincts, maintained the forms of their ancient hieroglyphics down to Roman times. They added to the number of them, and they invented for secular purposes abbreviated and cursive hands, founded upon the hieroglyphics, but they did not abandon the original and sacred forms which the god Thoth gave them. With the Chaldeans it was otherwise, and we can only conjecture what the prehistoric stages of their writing may have been.

The direct picturing of events is the earliest stage, and this has been employed by many savage

races all over the world. A long process of development, carried through by some inventive race, led to the representation of every word by means of pictures. The transition from pictures to arbitrary signs founded upon them must have been largely brought about by the nature of the substances upon which the writing was traced. The forms of the earliest Chaldean writing suggest, as I have said, that at a still earlier time it had been habitually carved upon wood. Straight lines can doubtless be more readily cut on a wooden surface than curves. Engraved writing upon wood seems to imply the previous invention of some kind of sharp metal tool. We have seen that writing, bronze, wood-architecture, and the worship of some divinities, appear to have been introduced into Egypt from the far East by way of the Red Sea. It now seems not impossible that writing, bronze, and part of the later religion of the country were imported into Chaldea by way of the Persian Gulf. The two conclusions are in perfect accord, and it may well be that a single civilisation of independent origin in some bronze-manufacturing district contributed important elements to the nascent civilisations of both Egypt and Chaldea, even as it may likewise be true that the governing class in both countries consisted of immigrants of the same Asiatic stock.

It is possible that, when the spade is thoroughly

employed as an instrument of historical inquiry, discoveries may yet be made as to the ancient history and affiliations of the Dravidian peoples. must have landed at the southern extremity of India by sea, and not come from the north by land. The languages of the Australian aborigines are stated to possess Dravidian affinities, so that a band of Dravidian influence appears in the most ancient times to have spanned the sea-route from the far East to the Persian and Arabian Gulfs. It must, in truth, be freely confessed that the whole subject treated in the present chapter is one as to which no certainty is vet attainable. The few facts that are known and the few indications that can be deduced seem to point in a certain direction, but any day new materials may be discovered, involving a reconstruction of our ideas about the probabilities of the past.

The development and discussion of theories is an interesting, and seldom a barren task. It helps to familiarise us with what is already known. It is an aid to the grouping of facts. But theory becomes an absolute impediment to advance if it be put in the place of fact and obstinately maintained, not as a thing provisional and to be lightly disregarded, but as one ascertained, or, still worse, elevated into an article of faith.

CHAPTER IV.

THE LEGACY OF EGYPT.

TREES,' says Pliny, 'were the first temples.' If this statement were accurate, the history of religious architecture would start from a definite point. Trees, as the shelter of divine spirits, doubtless fulfilled the function of temples for certain early races, such as the Teutons, and some of the tribes inhabiting the great Indian peninsula. Unfortunately, these were not the architectural races. The origin of temples does not admit of such single and brief description. Like every complex type, the various types of temple arose out of the union of many elements. A temple was a dwelling-place made by man to be the abode of a god, and was not, in the first instance, a place of worship; just as a tomb was the house of a ghost, or family of ghosts. and not originally a place for ghost-worship. But, as offerings and ceremonials came to be performed at tombs for the benefit of ghosts, and to prevent them from revenging their neglect upon the

living, so sacrifices and other sacred ceremonials came to be performed at temples to propitiate the deity, or family of deities, residing within them. And thus it fell out, that just as tombs grew to be more complex in structure and furniture with the development of funerary rites and anniversaries, so the simple type of temple grew more elaborate as the ceremonial observances which had to take place within the sacred precincts increased in complexity. Ideal gods continually outstripped the accomplished presentment of them; the grandest of earthly edifices was at length too insignificant to be their abode. When a prophet cried, 'Behold, the heaven and heaven of heavens cannot contain thee!' his words expressed the close of one great chapter of human belief, and saw the departure of the gods to higher regions of the ideal, their transference to a nobler temple of the mind,—a 'house not built with hands, eternal in the heavens.' It is only with the earliest stages of this chapter of belief, and with the arts dependent thereupon, that we are now concerned.

The unseen and the mysterious are cause of terror rather than of stimulating wonder to the savage mind. Undeveloped people, conscious of being surrounded by powers operating invisibly and inexplicably to them, desire to propitiate those powers, or to avoid their proximity. When sicknesses

and storms and what not were thought to be malevolent personalities or neglected ghosts, who came haunting the abodes of the living, the thing was to get rid of them, or, at least, confine them to a safe Sometimes a boat was loaded with good things, and the spirits of evil were enticed into it and sent adrift. Many a temple may, in the first instance, have been erected to be the home of some troublesome god, who, it was thought, would, if properly housed and attended to in an abode of his own, cease to disturb by his presence the homes of the tribesmen. A good genius, too prone to going a-wandering, might similarly be brought to reside beneficently near the people who desired his ceaseless protection. The natural thing to do was, in either case, to build him a house and there attend him with food at stated times, just as the ghosts of the dead were attended. I conclude, therefore, that the early type of temple in any locality must have been the same as the contemporary type of house, and that the origin of sacrifice, and other associated religious rites, is to be looked for in the analogy between the feeding and propitiating of invisible ghosts, and the attainment of a similar result in the case of other kinds of invisible beings. The ideas of men about their dead ancestors and kindred have generally formed part and parcel of their ideas about the gods and the invisible powers, though, in the nature of things, there exists no necessary connection between the two. It may hereafter be shown that religions and the ceremonials of divine worship took their origin in ghost-feeding and the cultus of the dead.

Gods had to be invented before temples could be thought of, and the invention of the gods belongs to a time so deeply buried in the past that almost all trace and memory of it has been lost. Certain backward and probably retrograde races, still existing, know no gods, but amongst them Totemism often exists. Sometimes Totemism is associated with a belief in gods. In no case can we be certain that a belief in gods developed actually out of Totemism. The ancient Egyptians, when history first reveals them to us, had passed beyond the stage of mere Totemism, and were already the worshippers of gods. Some, at any rate, of these gods were of foreign extraction. They were, or till recently had been, for the most part local divinities. With each of them there was associated a sacred animal in a mysterious relation, and this sacred animal had probably at a previous stage been merely the totem of the tribe settled in the locality. Such sacred animals may be considered as gods for all our present intents and purposes. Other races of prehistoric men worshipped fire. Others, again, paid honour to the sun or the

planets, or other prominent heavenly bodies. Deities were elsewhere discovered in streams, woods, and mountains. The great rivers were the manifestation of the divine to the dwellers on their banks; and all prominent examples of the constructive, reproductive, or destructive forces of nature attracted, by means of fear or wonder, the simple worship of early man. In fact, the conception of invisible beings, derived from the belief in ghosts, opened the way to the discovery of a god in every natural phenomenon.

It was easy enough to build a house for a sacred bull or hawk; and the genius of a wood, a stream, or locality might, without too great stretch of the imagination, be conceived of as visiting any enclosure set apart for his honour and for the dedication of material gifts to his service. Any hearth might be the home of the god of fire; but how should man avail to build an abode for the solar king or the royal majesty of the stars? The problem was one which the ancient priests solved in a manner creditable to their ingenuity, and which finds an echo down to the present day in the orientation of our churches. The first observers of the heavens could not fail to notice the risings and settings, the exits and the entrances, of the heavenly bodies. It was concluded that, like men and animals, the heavenly gods had their diurnal

periods of action and repose. The sun-god 'cometh forth like a strong man to run his course.' The beams of his earliest light, striking along the earth and entering the eastward-facing door of a hut, were the footprints of his coming. The light upon the inner wall was the sign of his presence. The shrine, therefore, not of the sun only, but of any other heavenly body, was a house built to face the point of its rising, whatever that might be. Such orientation was doubtless in the first instance roughly accomplished. By degrees greater accuracy would naturally be aimed at. It would be noticed that the sun from day to day changed the place of his rising, and appeared (in the northern hemisphere) at a horizon point more and more north of east as the summer advanced, and more and more south of east with the advance of winter. For a day or two, towards the longest and shortest days of the year, the point of sunrise would stand still, before returning eastward again, and the summer solstice would mark the period of the sun's greatest power. Observation of ruined temples shows us that many accurately oriented solar temples of ancient days were turned to this point. The dark avenues of the temples of ancient Egypt were stretched, like some great telescope, along the ground with uninterrupted passage eastwards from shrine to pylon. Annually, when the

important day approached, the doors were opened and the priests awaited, watching with emotions not hard to conceive the splendid development of the dawn. At length the looked-for moment arrived. The monarch of heaven stepped forth from his mysterious chamber of night; his chariot flashed with a blaze of glory along the world, and his majesty for an instant revealed itself within the inmost depths of the shrine of his temple. Small wonder if a wave of religious awe swept over the minds of his worshippers and raised them into communion with the indescribable wonder of the universe!

The most ancient temples, then, were simple shrines built to imitate houses and to fulfil the same functions. Of course no such early shrines survive; but have we any indication of what any of them were like? It is to Egypt that we naturally turn for an answer-Egypt, that often fossilised rather than destroyed the earlier stages alike of her civilisation and her art. The visitor to a normal Egyptian temple of the historic period passes first through the outer pylon or great façade gate, and thus attains access to an open courtyard which is sometimes surrounded by a portico. Beyond this courtyard is a hall, whose flat stone roof is supported on the needful number of columns. Behind this again are the dark and mysterious parts of the temple, the private

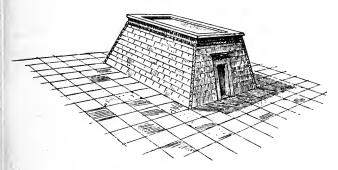
chambers of the god. In the midst of these, and often completely separated from all the other chambers by a passage surrounding it on all four sides, is the actual shrine. It may have a door at one or both ends, and when the doors were closed it was utterly With the doors open, a person standing in the shrine could look along the avenue of approach from the main entrance, and could behold through successive portals the rising point of sun or star on the far horizon. Sometimes perhaps, through the other doorway, the setting point might likewise be discerned. Such a shrine represented, and in many cases actually preserved, the distinctive features of the complete prehistoric Egyptian temple. In all existing examples the shrine, or Holy of Holies, lies under the same flat stone roof that covers all the inner part of the temple. But observe that in many cases it possesses the remarkable peculiarity that its walls (unlike any others, both of whose faces are protected by a roof) have an external batter or slope, and are surmounted, close under the roof, by the moulding called the Egyptian gorge. What does this indicate? There can be but one reply. The sloping walls and the moulding at the top have no meaning except as parts of an edifice standing free in the open air. Buried in darkness, under a roof, in a part of the temple inaccessible to the public, they serve no

possible purpose of ornament. Obviously they were retained because the normal form of a shrine had become fixed before the days when shrines were surrounded by dark passages and chambers, and when they yet stood free in the open air, in the midst perhaps of a sacred enclosure. In fact, the Holy of Holies of even a late Ptolemaic temple, such as Denderah, reproduces the form of the ancient Egyptian stone temple.¹

Close to the monstrous and clumsy building which Ramses III. raised in his own honour at Medinet Abu, near Thebes, there stands a smaller temple of good proportions and graceful detail, inscribed with the name of Thothmes III. A careful examination of this beautiful edifice reveals the fact that its various parts are of several dates. The courtyards of approach were added in Ptolemaic times; the dark chambers behind the shrine and the passage around it were built by Thothmes III.; but the shrine itself is a much earlier erection, the date of which we cannot with certainty fix. Thothmes simply built additions on to an existing temple. Mr. Norman Lockyer has shown how, in the case of a temple, accurately oriented at the time of its foundation towards the rising point of a star, the date of the foundation may be deduced. With succeeding centuries the star's rising point changes its

¹ See the plan of Edfu temple, p. 96.

position on the horizon, and the temple therefore no longer faces the phenomenon it was intended to observe. Thus Mr. Lockyer accounts for the angle between the axes of the two temples of different date at Medinet Abu. A rough estimate of the date of the older temple makes it, however, much more ancient than the time of Thothmes III. It should



TYPICAL ANCIENT EGYPTIAN SHRINE.

also be observed that the existing shrine-chamber has a door at each end. When it stood free in the open air the phenomena of the heavens could thus be observed through both doors; but when Thothmes added his memorial chambers at the back he rendered the western door useless. I point therefore to this shrine of Amen in the small temple at Medinet Abu as the best existing type of the most ancient Egyptian stone-built temple.

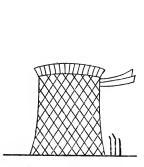
It was a plain stone edifice, oblong on plan, with a door at each end. Its walls had an outward batter or slope, and were crowned above by the Egyptian gorge. Its roof was covered with large flat stones supported directly on the walls. Each of the four angles of the building was protected by a circular moulding, returned under the gorge at the top of the four walls. Nothing could well be simpler or more monumental. Examples of later shrines of exactly the same type doubtless existed in great numbers. One, built for Ramses II., still stands in the neighbourhood of El Qab. It will be immediately observed that this form of building, though known only from stone examples, cannot have been invented by masons. It is obviously a form which had become fixed when some other building material than stone was commonly employed. There can be no doubt that this building material was crude or sundried brick, such as the modern inhabitants of Egypt, and all that part of the world, employ almost exclusively to-day. Crude brick is wonderfully easy to make and handle, but it has qualities of its own which a builder must take into account. compressible and friable material. Hence the walls of a crude brick building must be thicker at the bottom than at the top; this will, of course, be accomplished by making their outer surfaces slope. The

angles of such a building would be its weakest part; they were therefore strengthened with a bundle of sticks or reeds bound together. In the absence of cheap wood a suitable roof could, in rainless Egypt, be made out of a quantity of long reeds or other stiff straw daubed over with a little mud. Their ends, plastered together and jutting out at the upper edge of the walls, would produce the effect of a rough moulding, and would form a decorative finish to the wall.

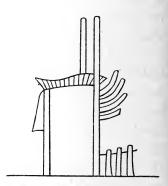
It was the formal imitation in stone of all these features, proper to a crude brick building, which was the foundation of Egyptian architecture; and I take this opportunity of asserting (in opposition to an opinion widely entertained) that it has always been the attempt to imitate, in one material, forms developed in and proper to another, that has generated and furthered the decorative arts.

We can even go behind the remote point we have thus inferentially attained, and stand as it were face to face with the simple hut-temples of the prehistoric village-folk of the Nile valley. The hieroglyphics in the earliest inscriptions depict, in truthful detail, the actual objects whose names were the same as the sounds they represent, or the objects which they ideographically portray. We possess, in the form of determinatives for the word

'temple,' at least two images of shrines of prehistoric type. These shrines appear to be built of mud and platted reeds, crowned above with the fringe which I have described as the original of the gorge moulding. In one case the building is strengthened with wooden posts at the angles, those in front being tall and corresponding to the great pylon masts of the



Mariette, Mastabas, 74.

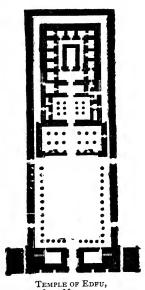


Mariette, Monuments divers, 18 b.

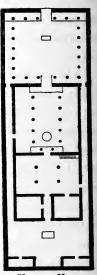
historic temples. In both cases a paling marks the limits of the sacred enclosure. These prehistoric shrines were, I conceive, the village temples of the ancient African tribes. Doubtless contemporary with them there were many natural or artificial cave shrines in the rock-walls of the Nile valley. I conclude that the built stone temples of a later date developed out of the mud-brick village shrine,

itself a mere copy of the habitation of the day; and that the cave or rock-cut shrine was the prototype of the *speos*. Thus the habitation of man, whether built upon the surface of the ground or formed by nature or art out of the hill-side, was the prototype alike of tomb and temple; and so the history of architecture goes back not to trees but to caves and tents.

The earliest temple, like the earliest abode, was a single chamber or grotto. To this nucleus other parts were by degrees added, as civilisation advanced and human needs became more complex. Where people lived, as in inhospitable climes they were driven to live, in a state of clan-communism they tended to increase the number of chambers in the communal house almost indefinitely. But across the broad strip of the world in which the oldest civilisations arose, clan-communism does not seem to have prevailed. Alike in Egypt, Arabia, Mesopotamia, and all we know of southern Asia, each family lived a separate life in its own house or tent. Such a house probably contained the same three essential parts as still characterise the dwellings of the common folk all over the east, to wit, an open yard, a public chamber, and a private or women's chamber, all included within a single wall. These three parts might be combined and elaborated in a variety of ways. In the case of a royal palace they became the khan (the court-yard, offices, and so forth), the seraglio (the men's part), and the harem (the private and women's part). Such was the palace of Ulysses as described in the



from Maspero.



HOMERIC HOUSE, according to the Odyssey, Hell. Jnl. vii. 173.

Entering the main portal the visitor found himself in a court-yard surrounded by a portico; beyond that was the public chamber with the domestic hearth; beyond that again were the treasury and private chambers of the head of the family and his women-folk. A passage, entered from the courtyard, passed all round the men's and women's apartments, and was enclosed by an outer wall. Compare with this the plan of a developed Egyptian temple such as Edfu. The similarity is striking. There is the same great enclosure wall, the same court-yard of entrance surrounded by a portico, then two successive reception chambers of magnificent dimensions, and finally the shrine and the private chambers and treasuries around it. All that lies behind the court-yard is in this case also surrounded by a passage.

Thus to the latest time the idea of the Egyptian temple remained the same. It was the house of the god. The inmost chamber was his actual abode. where his presence was from time to time revealed. Thither he could only be followed by the priests, his sérvants, or the princes, the members of his family. The Hall of Columns was his guest-chamber, and there he received the worshippers who came to pay They were for the time being his him honour. guests, and enjoyed the ancient rights of a guest. The stranger who entered a man's public chamber with due ceremony, and was accepted by the owner of the abode (the acceptation generally taking the visible form of an offer of food and drink) was regarded as sacred during the continuance of his stay. Hence by analogy there appears to have arisen the right of sanctuary, connected with temples in so

many lands. Sacrifice was the feast shared with a god, Sanctuary was the guest-right in the god's abode.

We have thus briefly discussed the temple-type which the Egyptians were the first to develop on a large scale, thereby creating their important style of architecture. It is now time to pass to a consideration of that style. Observe then, in the first place, that it was indigenous in Egypt. It arose, as we have seen, out of imitation in stone of mud-brick In all probability stone was used for tombs earlier-than for temples. The temple was for the living, and could be rebuilt again and again; the tomb was for the dead, and impious generations would inevitably suffer it to fall into neglect. Yet it was the 'eternal abode' of a ghost, and was believed to be immensely important to the ghost's welfare. There was, therefore, every encouragement for a man to build his tomb of the most durable materials. It may be that the actual invention of building with squared stones was made in the Nile valley, in consequence of this desire for sepulchral permanence, but there are difficulties in the way of this assumption. No doubt Nature has been generous to Egypt of the best building-stone, everywhere easily accessible and inexhaustible in quantity; still, if stone-building was an Egyptian invention, why do we find no traces of the early stages of the craft? The climate of Egypt does not destroy a ruin that lies upon the surface of the soil. Once buried under the desert-sand even paper endures for ever. But the oldest Egyptian stone buildings, Snefru's pyramid at Medûm and the contemporary sepulchres of his courtiers and family there and at Gizeh, show no faltering handiwork. On the contrary, for perfection of masonry the pyramid of Medûm can scarcely be surpassed. It may well be, therefore, that the people who brought bronze tools to Egypt likewise brought the developed craft of building in stone. What is equally clear is that they did not bring the art of stone architecture. The art was created in the Nile valley.

Mr. Petrie's discovery of Snefru's pyramid temple gives a fixed point of departure. He described it as follows, in the Academy, in a letter of March 31, 1891:—'The temple is joined to the east face of the pyramid. The front is about 30 feet wide and 9 high, with a door in the south end of the face. A passage parallel to the front, and 20 feet long, leads to the chamber, which is 20 by 7 feet. A wide doorway leads from this into the open-air court built against the pyramid face. The altar of offerings, quite plain, stands in the middle of the court, and an obelisk on either side of it. These

obelisks are over 13 feet high, with rounded tops and uninscribed.'—The temple is absolutely undecorated. Its walls are plain and vertical, with no moulding or cornice anywhere. Its roof is flat. There is, therefore, no art of architecture manifested in this edifice—nothing but the craft of building. The same is again true of the fourth dynasty granite building in the neighbourhood of the Sphinx at Gizeh. There is a certain luxury of material in it, and a remarkable finish of workmanship, but, beyond some simple grooving of the vertical exterior face of the walls, there is no trace whatever of decoration, nor is there any beauty of proportions or other artistic charm.

Each of the three great pyramids had a temple, corresponding in position to that of Snefru's pyramid. All three were clearly similar in style to the granite temple. Fourment (Description d'Héliopolis et de Memphis, Paris, 1775, p. 259) gives the following account of them:—'A quelques pas de la second Pyramide, on découvre les restes d'un temple; qui en occupoient presque toute la face; mais ceux que l'on voit tout près de la troisième Pyramide, sont beaucoup plus entiers. On trouve quatre piliers, et on tournoit autour de ces piliers comme par une espèce de collatérale: les pierres dont ces temples étoient bâtis, avoient 27 pieds de long sur 18 de large, et quatre d'épaisseur. C'est à leur grosseur

énorme qu'on est redevable de ce qui en reste : ces pierres étoient revêtues de marbre granite.'

According to Mr. Petrie, all these temples were built with a core of megalithic limestone blocks, weighing some 100 tons each, over which was a casing of granite or alabaster. The temple of the second pyramid seems, like the granite temple, to have had an open court on its roof. Light was admitted by holes in the roof. The doorways were unadorned. Flat walls, monolith piers, and beams of square section supporting flat roof slabs,-in all this there is no trace of architectural art. Plenty of skilful handicraft is implied, but no artistic conception. The elaborate proportions of the Great Pyramid are not artistic, for no impression is produced upon the eye by the position of hidden chambers or the slope of passages. One does not see how any style of decoration was to be suggested by stone monoliths lying one upon another; fancy could not be expected to play with them. She had to begin on something lighter.

The same lesson is again taught by the private tombs, or *mastabas*, of the upper classes of the same period. They do not possess separate temples for the presentation of offerings to the ghost, but they often contain chambers specially built for that purpose. These have been excavated in great numbers.

The best of them is the famous tomb of Ti at Sakkarah. No one, however, will claim that as a work of architecture. It is a mere solid mass of masonry traversed by certain ill-proportioned passages, leading to chambers equally ill-proportioned. Square piers are employed when necessary for supporting the roof. The walls are covered with a kind of pictorial chronicle of the occupations and property of the ghost of Ti, but this is not decoratively handled. The beginnings of architecture must be sought elsewhere. We find them in smaller objects of funeral furniture. Stone sarcophagi, such as Khafra's or Khu-fu-ankh's, imitated wooden or crude brick edifices before such imitation was attempted on a larger scale. The stele, or imitation door, through which the ghost passed to receive his victuals, was constantly carved in stone to resemble the ordinary house-doorway of the period. To treat the actual stone portal of a tomb in a similar way was a next step. Thus, by degrees, imitation in stone of features proper to wood and crude brick structures became more and more frequent.

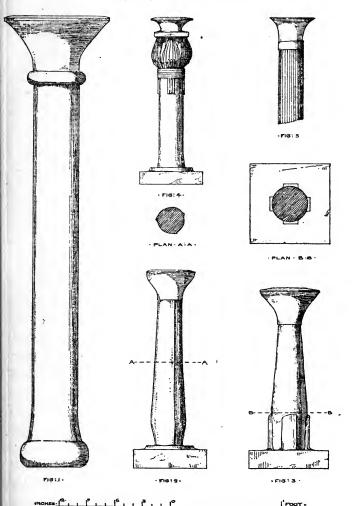
We saw in the last chapter (p. 71) how the evidence of hieroglyphics of the time of Snefru proves that wooden columns, with capitals of the papyrus form, had long been a fixed architectural type. They had been fashioned in wood and used for

centuries, and perhaps thousands of years, before any architect attempted to copy them in stone. Petrie noticed (A Season in Egypt, 1887, Plate XXV.), on either side of the doorway of Khufu-kha-f's tomb at Gizeh (fourth dynasty), a graceful column carved in low relief, represented as supporting the lintel. It has a capital, the profile of which is the Egyptian gorge, and it rests on a cushion base (fig. 1). Actual columns, mostly rather clumsy in form, are found in some sixth dynasty tombs at Assouan, Isbayda, and elsewhere. Moreover, sixth dynasty doorways are better proportioned, and often very effectively decorated. The interiors, too, of tomb chambers of this period are spacious, and produce a pleasant effect upon a person entering them. If we had a few more remains, or if those we do possess had been more wisely studied, we could generalise more confidently. As things are, it is only possible to express the opinion that, about the time of the sixth dynasty, Egyptian stone-building began to enter the domain of architecture.

The first great period of stone architecture we know of in Egypt was contemporary with the duration of the Middle Empire. Unfortunately, not a building (except, perhaps, that shrine in the midst of Thothmes' temple at Medinet Abu), nay, scarcely so much as the plan of one, has come down to us from

that relatively modern age. It is only from the so-called Speos Artemidos and the rock-cut tombs of Beni-Hasan, Assiout, Assouan, and other places, and from a study of certain interesting relics unearthed by Mr. Flinders Petrie at Kahun, that we are enabled to form a sound judgment on the matter.

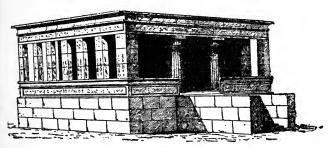
The mounds of Medinet Kahun, in the Fayum, which Mr. Petrie excavated, covered the ruins of a town once inhabited by the workmen who built the pyramid and dependent temples of Usertasen II., a king of the twelfth dynasty. The town was abandoned when the works in question were completed. All objects found in the ruins of the houses must therefore be dated at about 2500 B.C. Now, from many houses Mr. Petrie recovered certain remarkable stands in the form of columns with base and capital, crowned on top of all with a cup or hollowed out into cup form (figs. 2, 3, 4, 5). In the cups were found remnants of bread paste, affording proof that these stands were altars for domestic offerings, Amongst the considerable number of such stands which have been found there are examples of every known type of Egyptian column and capital. Remembering that the inhabitants of Kahun were chiefly masons, actually employed in temple-building, we may well conclude that in these altars we possess repetitions of the types of column employed in the temples of



Usertasen, and in the marvellous mass of temples, not far distant, which were known to the Greeks by the name Labyrinth.

From the graceful forms suggested by the models. we are prepared to assume that the buildings of the period must have been characterised by no little architectural charm. We are confirmed in this assumption by what we find in the best rock-cut temple and tombs of the period. The Speos Artemidos, though it bears no earlier name than that of Queen Hatasu of the eighteenth dynasty, was obviously cut out of the rock at the same time as the neighbouring Beni Hasan tombs, which it closely resembles. It is therefore the oldest existing Egyptian temple. It consists of an outer portico, whence a passage leads into the spacious inner chamber, which contains a niche carved in the wall opposite the door. All the parts are excellently proportioned, and the effect of the whole is architecturally fine. Amongst the tombs, that of Ameni, an officer of Usertasen I., is pre-eminent. The conclusions derived from these are supported by the evidence of the sadly wrecked sepulchre of Hapzefa at Assiout, that of Se-Renpu at Assouan, and many more. Every one of these excavated chambers is beautiful in its proportions, and tasteful in the colour and distribution of its decorations. The porticos of approach,

though simple, are always architecturally fine. The proportions of the parts of every member, and of the various members to one another, are excellent. If the designers of tombs were thus gifted with a fine architectural understanding, how much more the architects of a great temple like the Labyrinth, the largest in area that the world ever saw. Small wonder that Greek travellers were so much impressed, not alone by its size, but by its beauty also.



TEMPLE OF ELEPHANTINE.

The great period of Egyptian architecture did not end with the Hyksos invasion. The style was, if I mistake not, a product rather of Upper than of Lower Egypt, and it was Lower Egypt that chiefly suffered from the Hyksos. When, therefore, with the eighteenth dynasty, Upper Egypt, under the leadership of Thebes, again came to the front, the style revived in all its splendour, and in the time of

Hatasu, Thothmes III., Amenhotep III., and Kuenaten (the great monotheistical heretic), wonderful works Unfortunately, almost everything of the were made. period has been ruthlessly destroyed. Last to go was the charming little temple at Elephantine, but fortunately not until Napoleon's Commission had made an accurate record of it. What must have been a scarcely less beautiful shrine, behind El Oab. is still standing, and so are portions of Hatasu's funeral temple, known as the Dair el Bahari, whilst two charming temples erected under Thothmes III., one about the old shrine at Medinet Abu, the other against the north wall of the great enclosure of Karnak, are still in an excellent state of preservation.

Some heavy and bad work was likewise done during the latter part of the eighteenth dynasty, as the portion of the great temple of Luxor, built by Amenhotep III., proves; but, in the main, the virtues of the style were preserved even into the reign of Seti, of the nineteenth dynasty. The best temple built for him (so far as we can now judge) was the votive temple at Abydos, but it will be observed that in it the charm lies, not in the architecture, but in the wonderful decoration.

The vice that destroyed the style was the desire for extravagant dimensions. Now, it will be at once perceived that there were limits to the possible size of a building in the Egyptian style. The space between any two columns was limited by the length of the monolith beam they had to support, and such beams, if increased in length, had to be likewise greatly increased in area of section and weight, and a slight increase in length beyond a certain point involved a considerable increase in weight. Increase of weight in the roof involved increased thickness in the columns, and, when a certain point was reached, this increase of thickness used up all the space gained by the increased length of the roof-bearing stone beams. A further increase in the thickness of the columns was involved by any increase in their height. It is therefore clear that the larger any chamber of a stone edifice in the Egyptian style was made, beyond a certain point, the greater did the ratio of the volume of the solids to the volume of voids become. There was a certain value for this ratio beyond which it could not be carried without producing an ugly result, and, so far as we can now tell, that value was passed in the time of Seti, and thenceforward the style of the architecture of Egypt went from bad to worse. Almost all the temples built for Ramses II., the 'great' Ramses, are frightful monstrosities, worst of all being the Ramesseum, and that Great Hall of Columns added by Seti and Ramses to the temple of Karnak. Through the reign of Ramses III. the decadence

continued, and a glance at the lumbering ugliness of the vast temple at Medinet Abu is enough to show the degradation to which the Egyptian style descended. Whether the strong Mesopotamian influence, which is so visible in Egypt throughout all the nineteenth dynasty, was the cause of this decadence, is a point as to which I do not care to express more than a suspicion.

Under the twenty-sixth dynasty all the arts of Egypt revived, and it is not improbable that architecture shared in the movement. Too little, however, remains to decide the question. At the very close of the pagan period, in the reigns of the Ptolemies and the Roman Emperors, the last great school of Egyptian architecture flourished. It is not correct to describe this revival as the result of Greek influence. Greek influence was a factor in it, and an important factor. The Greeks had worked out to ultimate perfection the whole theory of architectural proportion, and good proportion was an essential element in all good Egyptian architecture, as in all architecture whatever. The architects of Egypt maintained the ancient traditions, though, as artists, they could not fail to experience whatever fine influences they came in contact with, but they only gave effect to those influences in so far as they were thereby enabled to develop to an ultimate perfection

the style of their own country. A temple like the charming little Dair el Medinet, near Thebes, shows how fine in detail and proportions a small Ptolemaic edifice could be; whilst the world-renowned fanes of Edfu, Denderah, and Esneh manifest the surpassing grandeur which the style was capable of attaining.

Observe now that architecture was, par excellence, the Egyptian art which influenced the Greeks. Mediterranean folk, as Mr. Petrie has shown, were settled in Egypt as early as the twelfth dynasty. There were certainly plenty of them there under the nineteenth. The excavations at Mycenæ have proved that eighteenth dynasty Egyptian pottery was exported to that locality, a portion of a cartouche of Amenhotep III. (Ephemeris, 1888, p. 156) having been found in Tomb 49. The ancient world was not the collection of isolated centres that, till recently, it was pictured to have been; nor was Egyptian civilisation so very much in advance of contemporary Mediterranean civilisation. Commerce and travel are far older than history. The mutual influences of peoples dwelling in localities relatively widely sundered from one another, were operating even before the discovery of metals. The Greeks, who visited Egypt in the historic period and recorded their observations, tell us that it was the religious

architecture of the country that chiefly impressed them. Others beside the men of Egypt could work metals, make glass and pottery, paint, weave, and all the rest, and did these things at least as well, and in many cases at as early a date as they were done, on the banks of the Nile. But of all races of the earth the Egyptians were first both in time and, amongst their contemporaries, in quality for their stone architecture. The fundamental idea of the best architecture of Greece, the Doric style, was borrowed from Egypt. But a decadent is never an aggressive, conquering style. It was not the monstrous and hideous buildings of the Ramessides that founded the architecture of the world, for in them there was properly speaking no art. proportion was the root of life in Greek architecture. Whencesoever the Greeks borrowed the different members of their decoration, or what may be called the raw material handled by their art, is a matter of relatively small importance. It is the origin of the principles that guided that handling, the pedigree of the style, that is worth the trouble of dis-Herein, then, consists the importance of the architecture of Egypt in the long period that intervened between the opening of the sixth and the close of the eighteenth dynasties. That architecture in all the well-preserved monuments that we can

investigate or approach manifests the same excellent virtue of proportion which the Greeks elaborated to final and unsurpassed perfection. But for the architecture of Egypt the Parthenon could not have existed.

In the sculptured work of many peoples the influence of the Egyptian canon may be perceived, but this influence is never paramount nor vital. Certain early and, for the most part, very bad Greek sculptures are manifestly attempts in the Egyptian style, but they gave birth to nothing. It was the influence of the East, acting upon the local style developed in metal-work and other embellishments, that generated Greek sculpture.

In the large domain of decorative art Egypt received as much as she bestowed. Some Egyptian pottery of the finer kind is found on Greek and Etruscan soil; but then no inconsiderable quantity of Phœnician, Ægean, and even early Italic (black) pottery has been discovered and identified in different parts of Egypt. Trifles such as scarabs were imitated by the Etruscans, and one might point to various other minor imitations made by foreign peoples, and minor influences exerted by Egypt upon foreign arts. The total of the whole was small and unimportant. Only the Phœnicians attempted any systematic imitation of Egyptian principles of decoration and design; and this fact is significant because the Phœnicians

were an utterly inartistic people. They were the English of the ancient world. They made cheap forgeries of Egyptian wares, just as in our own day Birmingham forges the trays of Japan or the gods of India; but these things are done not for enjoyment, the only seed of art, but for Mammon, god of modern Philistia. The influence of the Phœnicians upon Art-History was nil, except in so far as they were common carriers, salesmen, and occasionally imitators of the works of art of other peoples.

Egyptian art bore to the contemporary arts of the ancient world a relation similar to that now borne by Japanese art to the arts of Europe. Egyptian works of art were admired and purchased by other peoples, but they were not imitated, and for the same very good reason that prevents Japanese works of art, though greatly admired, from being directly imitated by good European artists. Japanese art is the outcome of the nature and conditions of life of a remarkable and ancient people. It expresses in all points the ideal of their existence. Its subjects fall within a narrow range. The treatment of them is the outcome of a long and slowly-developed tradition. The education of Japanese artists is moreover accomplished in slow, complete, and traditional wise. Japanese art, therefore, belongs entirely to Japan, and cannot be imitated elsewhere. All its parts are

interrelated so completely that one principle, manner, or method cannot be taken away from the rest. Foreigners may admire its spirit, and attempt to infuse something of the same kind into their own work, but its ideals and forms are not and cannot become theirs.

So it was with Egypt in face of the ancient world. It was a country apart. Its spirit was wholly different from that of any other nation. civilisation was largely the gift of the Nile and the climate. Nature surrounds the Egyptian with a visibly law-abiding group of powers. It cuts him off by deserts from the rest of the world, and closely unites him by the Nile to all his fellow-countrymen. His life is despotically determined for him by the recurring ways and habits of his river. Hence it came to pass that when the Egyptians were an organised and independent people, working out their own ideas for themselves, they developed a civilisation unique in character, and an art that entirely expressed it. At this art they laboured for some five thousand years, and, but for the inroad of foreign and revolutionary influences in the wake first of Christianity and afterwards of Islam, the ancient traditions would have maintained themselves in the Egypt even of to-day, just as traditions almost as ancient have maintained themselves in China.

From these facts it will be at once perceived that by however much the art of Egypt was suited to express the Egyptian ideal, by so much was it unsuited to express, or even to enter as a factor into the expression of the ideals of other and differently constituted nations. And all other nations were so very differently constituted from the Egyptians. Greeks, with their loose confederations, succeeding one another under various hegemonies and names, were most differently constituted of all. In studying the broad bases upon which Greek art rested, it is therefore unnecessary, except in the case of architecture, to look for any considerable contribution from Egypt. All that was characteristically Egyptian in the decorative and representative arts of Egypt was firmly rooted in Egyptian soil.

CHAPTER V.

THE LEGACY OF CHALDEA.

T has already been shown how Chaldean civilisation arose at the meeting-place of the highways of mankind. We have now to manifest the qualities of the art which that civilisation produced, and the influence exercised by it upon the art of the ancient world. A civilisation flourishing where the world's highways met could not but produce far-reaching effects. Its influences may be traced from China in the East to the Pillars of Hercules in the West. history of the world's science but must take account of the astrologers and priests of the Chaldees; no history of the world's art but must give a prominent place to the palaces of Assyria, and the produce of the workshops of Babylon. Religion, science, literature, commerce, art-upon every one of these did Babylon set the seal of her powerful personality, and the impress can be traced in them at the present day.

The style of art and the capacity of the artists of ancient Chaldea, at a time variously estimated at

from 2500 to 4500 B.C., are best seen in the remarkable series of diorite and porphyry sculptures now in the Louvre. They were discovered at Tello, amongst the ruins of Lagas, by M. de Sarzec. Most of these figures were originally set up by the architect-king Gudea, to be, as it were, his deputies, worshipping for ever in his stead in the temple of Nin-girsu, his divinity. On one of them is an important inscription, recording how the diorite of which it is made was fetched, apparently in ships, from distant Sinai, and how stones for the temple were brought down the river from the mountains of the north and west, with cedars from Amanus, and other materials from other places not yet identified—a proof of the extent of the commerce, and apparently of the sea-going commerce, of that remote period.

The quarries from which Gudea fetched his hard stone were probably the same that were worked by the ancient Egyptians as far back as history reaches. We may conclude that the sculptors of the two countries were acquainted with each other's methods. Both employed diamond drills to cut the unruly material of which their chief works had to be formed; both were forced by the nature of that material to adopt a similar broad treatment of surface, and there may have been much else in common between them. The difference between the ideals of their art is, therefore,

the more remarkable. It was, in fact, a fundamental difference. Figure sculpture arose in Egypt to supply material forms intended to take the place of the body as a support for the ghost in the event of the body being utterly destroyed. In later times the Egyptians invented various uses for portrait statues other than, but developed out of, this primary use. The statues of a man's ancestors found a respected place in his abode, and formed the subject of important ceremonials. The Romans inherited this Egyptian custom, and maintained it down to a late date. An examination of the pictorial representations of ancient Egyptian funeral ceremonies shows what importance was attached to everything concerning the statue of the deceased. That statue was intended to endure for ever. It might be from time to time seen by the man's descendants when they came to make offerings to his ghost, but to be seen was not its primary intention. It was made simply in order that it might exist. By existing and enduring it performed its function. It was not intended as a mere memorial for a man's descendants, but to be of use to the ghost of the man himself and, above all things, to last for The endless repose and persistence of the tomb, therefore, found expression in Egyptian portrait sculpture, and became the controlling ideal of the artist. Statues of the Pharaoh and other gods might have been characterised by another spirit, but the cultus of the dead inspired all Egyptian worship, and thus gods and ghosts came to be materialised under the governance of one ideal.

The sculpture of ancient Chaldea conveys us into a different spiritual atmosphere. Gudea's figures are not musty of the tomb, but are, and were intended to be, instinct with living worship. They were to stand before Nin-girsu for ever, a visible incorporation of Gudea's worship and prayer. They were to be seen of gods and men. In action as well as form they had need to be recognisable. It is true that the Egyptian sculptors under the fifth dynasty attained no inconsiderable skill in the representation of the simpler attitudes and gestures of the human figure, but this cannot be said of Egyptian sculptors as a whole. If the head was a likeness, that sufficed. The figure was constructed according to a simple scheme, and not studied from the life. But the Chaldean artist desired to make the stone live, and therefore studied minutely from the living model. This is apparent not only in the truthful detail observable in the extremities, but still more in the vivid look of life which many of these broken images Moreover the heads that have survived are retain. clearly portraits, one perhaps of a Semite, the other (with a turban) of an Elamite. The aspect of vitality

is attained partly by the just rendering of a simple but natural pose, partly by the honesty of the artist's attempt to reproduce the main forms of the muscles in the nude parts of the figure. Gudea is made to look like a strong man, like one whose blow would be effective. He is a man of war worshipping a warlike divinity. The Egyptian ideal of the tomb was not a warlike ideal. The ghostly inhabitants of Amenti did not fight their way to bliss, but relied upon the wiles and magic of priestcraft to bring them safe into the Boat of the Sun. The people of Tigris and Euphrates were no such mild folk. They were fighters, and their admiring fancy conceived of no figure that was not strong. Herein is struck the key-note of the Chaldeo-Assyrian school of sculpture. This was the quality that made their art potent, and carried its influences afar.

We deal with the Chaldeo-Assyrian school as one, because Assyria, so far as we yet know, borrowed her art, and even perhaps hired her artists, from Chaldea. In Chaldea the style seems to have arisen—Chaldea the meeting-place of men, where various influences could marry and produce. Out of Chaldea went forth the colony that founded the Semitic kingdom of Assyria, and out of Chaldea went forth the art called Assyrian. It is likely enough that in a mixed population like the Chaldean

the artistic class and the fighting and governing class were racially distinct, even as they are in England to-day. The fighting and governing Englishman, who has founded a world empire, is in a general way recognised as the inheritor (doubtless from a mixed ancestry) of Teutonic characteristics; the artistic English are often described as Celtic, a word that in modern use only means not Teuton. days the Semitic element in Chaldea was small. Chaldean art was certainly not of Semitic origin. Gradually the Semitic folk increased until finally they became the dominant class in the country. In Assyria their predominance was still more marked. Though Chaldean art was not created either by or for the Semites, but developed under the hands of Accadians and Sumerians, its subject-matter was greatly influenced and by degrees almost entirely dictated by Semitic patrons. Gudea liked to have himself recognisably portrayed; but when the Semites gained the upper hand, they no longer demanded nor perhaps even permitted portraiture. The persistent Semitic superstition connected with the Evil Eve has always tended to make the East iconoclastic. The laws of the ancient Hebrews prohibited portraiture in the most uncompromising fashion. Mohammedanism adopted and spread wide the same restriction. For a time the influence of the East availed to impose iconoclasm even upon the orthodox Christian Church. It need not, therefore, be matter for surprise if in all Assyrian art we find no example of portraiture. The temples of Egypt were filled with the likenesses of the reigning Pharaoh; there were many images, but not one likeness of a king of Assyria in all the area of his domains.

But if the individual traits of the king's likeness might not be reproduced by Assyrian artists, they were, on the other hand, encouraged to make typical representations of men of all classes. The walls of Assyrian palaces were covered with painted basreliefs, either of talismanic import or descriptive of the great events of war, worship, and the chase, wherein the king had been concerned. Whether the particular monarch were Sargon, or Esarhaddon, or Assurbanipal, he was represented under the guise of the ideal Assyrian; and the self-same type was multiplied in the case of every Assyrian general or soldier who found place within the design. same head, repeated again and again, varying indeed somewhat from generation to generation, as all ideal types must vary, did duty also for the heads of the great winged lions or bulls, and of human-headed divinities; and what is true of the heads is likewise true of bodies and limbs. The Assyrian artist had

to chronicle his histories of war and the chase by means of a number of typical figures. The same man, indefinitely multiplied, went a-hunting and slaughtered lions, or wild asses, or gazelles, or whatever they might be. However much the positions and movements of individual animals might vary, the animals themselves were in every case typically conceived, and repeated as often as required. The importance of this peculiar restriction, in its effect upon the artistic treatment of the human figure, will be at once apparent. Only the common wall-decorations in Egypt were made up of images of the average man; the best works of Egyptian art dealt with the individual, as witness the Ramses II. at Turin, or the royal portrait heads of the eighteenth dynasty in the Gizeh Museum. Assyrian artists were forced away from the individual to the ideal, and the ideal imposed upon them was one of strength and life. Not a man with feeble arm or wasted form were they allowed to depict. They were called upon to make visible many a cruel action, and much that was gross, but nothing weak or unmanly. The Assyrian ideal of divinity included a similar mixture of qualities, little admirable to modern tastes, which are inclined to err somewhat in the opposite direction. An Assyrian's god was always strong, and full of the rage, the life, the power, and the cruelty of war.

The human form seemed insufficient to embody his qualities. His swiftness was as the eagle's, his strength as the strength of a lion or a bull; only his intelligence and foresight were gathered from man. Thus it came to pass that Oriental artists were led to develop that remarkable series of creatures halfman, half-beast, or of mixed bestial forms, which in due course spread over the world, and were imitated in many other countries. Angels, cloven-footed fiends, sirens, centaurs, sphinxes, and all the rest of the imaginary fauna of the heavens and hells of human belief can be traced back to the artists of Mesopotamia, or the men who instructed them.

The Assyrian ideal of vital strength, the ideal of a nation or caste of warriors, was of course, in every respect, more potent than the silence and repose of the tombs of Egypt. Assyrian artists were kept by it in contact with nature, and with nature in those forms that manifest most plainly the power and glory of life. Working, as they did, almost wholly for the princes and commanders of the people, it was for them to clothe in visible form what their patrons enjoyed to remember and recount. Their function was similar to that of the makers of sagas in Viking days. Their masters were proudest of their battles and their hunts, the march of armies and the slaughter of foes, bestial or human. It was

under these conditions that the palaces of the kings of Assyria were decorated with that vast series of pictorial bas-reliefs, some of which form a chief glory of the British Museum.

A comparison between the treatment of the lion in Egyptian and Assyrian art plainly manifests the contrast between the ideals of the two schools. The British Museum contains specimens of both, to wit, a pair of recumbent lions of the time of Amenhotep III., and one standing and roaring from a gateway of Assurnazirpal's palace. The Egyptian lion is powerful and yet serene, full of dignity wrapped in repose. He, like the Assyrian, was made as fitting ornament for a royal doorway; he is there to repel an enemy, but the might of the king is such that no enemy dare approach to attack him; the lion, therefore, has but to watch, and is called on for no violent display of strength. The lion of Assyria, on the contrary, roars, and is eager for the attack. He is not content to await and defend; he is hungry for prey. Like his master, he desires to plunge at once into a combat, to find some enemy for the delight of destroying him. It will be remembered that Amenhotep III. was the greatest lionhunter among the Pharaohs of Egypt. His lionhunts in Mesopotamia were events of which he was very proud, and he recorded them in numerous small

inscriptions, which his faithful courtiers buried with them in their graves. But mere inscriptions would have been poor comfort to Assurbanipal, king of Assyria, who, for his part, caused himself to be surrounded in his palace with life-like representations of the details of the hunt, wherein we can still behold lion and lioness in their royal paradise, or issuing forth upon the field of combat, or chased by men on horse and foot, or slain with arrows or swords in hand-to-hand combat—sport, indeed, worthy of a king!

Here was a school of art inspired by no merely local ideal or tribal creed, but founded upon nature, and upon nature in a mood that awakens the sympathies of all men. It was an art well suited to spread its influences afar. It did, in fact, so spread them. Even Egypt felt the effect. Hunting scenes of visibly Oriental character were caused by Ramses III. to be sculptured on the walls of his temple at Medinet Abu. We shall find that the kings of Ægean States drank wine, at even an earlier date, out of golden goblets upon which the hunting of the wild bull was embossed, evidently under Oriental influence, with a freedom of treatment and a truth to nature that cannot but excite our utmost admiration. remnants of the wall paintings of the palace at Tiryns tell the same tale. Not only was the manner

of Assyrian art capable of universal imitation, but its subjects were of world-wide interest. War, the chase, the feast, with the combined delights of wine, woman, and song! It may have been often cruel and even immoral in tendency—some king of Assyria drinking, with the head of his slaughtered enemy for pleasant prospect—but after all it was an art that suited the humour of a day of passion. Small wonder that the Phœnicians should have found its productions a more profitable commodity to spread abroad amongst the peoples of the West than those of the religious and local art of Egypt.

The religious architecture of Chaldea and Assyria produced little effect upon the Western world, though it seems probable that its influence was carried to the far East. Without devoting space here to the consideration of the nature of Chaldean religion, it will suffice to note that its ceremonial was largely concerned with observation of the heavenly bodies. The divine powers and beings which the Chaldean imagination conceived of as present on all sides, the spirits of winds, storms, floods, and every kind of devastating meteor, included amongst their most powerful kindred the monarchs of the solar, lunar, and planetary spheres, whose influences for weal or woe were believed to be great upon men. In Egypt the light of those heavenly bodies that were specially

adored or observed was, as it were, enticed into the recesses of a noble shrine, built long and low upon the ground. In Chaldea, a horizon often obscured with mists prevented the rising of the stars from being well observed from the level ground. Temples had therefore to be many stories high and raised upon mounds. This doubtless was the reason why, in flat Chaldea, the staged tower or Zigguratt became the typical temple form. We may search through all the Western world and we shall find no staged towers in any way resembling those of Babylon, except the minaret in the Mosque of Ibn Tulun. Even the temples of Phœnicia were not in the least of the Babylonian type. It was Egypt and not Chaldea that first worked out the plan of the normal Western temple.

The reason for this is not far to seek. Chaldea was a country without wealth either of stone or wood—a flat alluvial plain, rich in all manner of verdure and pleasant crops wherever irrigation extended, but with no forests and no quarries. Great buildings, therefore, in Babylon and the cities of the plain, were perforce formed of brick, and in the first instance of brick sun-dried. Casing stones of alabaster or other rock might be imported for decoration, especially of interiors, but the bulk of every building, whether temple or palace, had to be of brick. The



Babylonians, therefore, developed brick architecture to a high perfection. Both they and the Egyptians knew the principle of the arch, but as an architectural feature it was not a favourite with them. It seems. however, that vaults and domes were employed by Chaldeans and Assyrians more frequently than by the Egyptians to roof over chambers in palaces and houses. The development of the dome appears to have been ultimately effected in Babylonia or its neighbourhood; and if false domes are found in the tombs of Mycenæ or elsewhere, the fact may be taken as pointing to Oriental influence. But the West did not want temples of the Chaldean type. They would have been meaningless in any Western country. A great artificial hill is striking when it rises out of a plain, but can produce no effect in a hilly country. Moreover, the West was not provided with soil and sun for the making of crude bricks; nor, if it had been, was that material strong enough to resist the attacks of a changeful climate. Where stone is easily accessible, temples will not be built of crude brick by any wealthy people. Considerable alterations of temperature, and still more of moisture, must rapidly destroy a building made of such frail material. The West, therefore, was driven to build in wood or stone, and naturally experienced in this the influence of the great stone-building country of Egypt. It derived details of architectural decoration from the East; but the main traditions came from Egypt.

After all, it was not their temples, but their palaces that were of chief architectural interest to the majority of the warlike kings of the East. The palaces of Egypt are utterly destroyed, and it is much if we can guess at some vague semblance of them; they appear to have been light structures not intended to endure, and perhaps mainly built of wood. Doubtless they were luxurious, but they did not vie with temples and tombs in monumental splendour. attention bestowed by a king of Egypt upon the gods and the future life was concentrated by the kings of the East upon themselves and their life in this world. Whilst Pharaoh was constructing his 'eternal abode,' the king of Assyria was building and adorning a palace for his mundane delights. Every king seems to have built himself a new palace, and thus from generation to generation the art of palace-building was practised, and doubtless steadily developed.

It is unfortunate that excavations have not yet revealed to us the entire plan and arrangements of the most ancient Chaldean palaces. Tantalising portions of plans have been recovered, but the search for sculpture and museum treasures has proved more attractive to excavators than the search for mere architectural facts. The expense of moving the vast masses of earth of which these palace-ruins consist

must likewise be borne in mind. The only palace that has been at all thoroughly explored from an architectural point of view is that of Sargon at Khorsabad, built towards the end of the eighth century before It is an example of the fully developed palace type from which we can argue back to the earlier and simpler forms. For our present needs it will suffice to state that the building was raised upon a vast artificial base, that it was a one-storied, flat-roofed structure, and that it consisted (broadly speaking) of three main groups of chambers, each group being associated with a courtyard of its own. One of these groups formed the palace proper, one was devoted to the harem, and one consisted of stables, storehouses, offices, and the abodes of soldiers, servants, and all manner of attendants. There was also a zigguratt attached. A detailed examination of any of these groups of chambers shows that the palace unit was a courtyard with one or two chambers leading into it. In fact, the same unit of abode developed under the influence of Egyptian priestcraft into the great temples of the Nile, and under the demands of Assyrian luxury and ambition into the palaces of Nineveh.

It is clear that a huge crude-brick structure, like Sargon's palace at Khorsabad, with massive walls and vaulted, domed, or flat coverings to its chambers, can have possessed little purely architectural charm.

Indeed its only architectural features were buttresses, battlements, and the simple breaking up of the large wall-surfaces by means of a kind of panelling common in Chaldea, and which finds a sort of parallel in the grooved decoration carved on the outer wall-surfaces of ancient Egyptian temples. So that the palaces of Assyria and Babylon must have derived their beauty not from structural but from applied decoration. Many indications lead us to believe that such applied decoration was of the most sumptuous character. It is needless to refer at length to the majestic winged lions and bulls, human-headed, which must have added great dignity to the vaulted gateways, so important in every Oriental public building; nor need we delay over the panelling of carved and painted alabaster slabs, which seem to have been, in Assyria at any rate, the customary and doubtless magnificent decoration of the lower part of the walls in state chambers and corridors. The decorative arts whose importance it is essential to emphasise are those that arose in the special service of brick.

The most important of these was the art of making glazed and coloured earthenware, which has flourished in the East during thousands of years, in the hands of Babylonians, Persians, Syrians, Chinese, and Arabs. The tombs and rubbish-heaps of Egypt have yielded multitudes of small and often most beautiful objects

of all dates, made in glazed earthenware or so-called porcelain and sometimes both exquisite in colour and wonderful for minute finish. A chamber in the steppyramid at Sakkarah was decorated with glazed tiles, apparently under the Ancient Empire, and it seems possible that tiles were used to adorn the private houses of ancient Egypt. But glazed earthenware was not largely developed in Egypt as a mural decoration, and it is a remarkable fact that the only important Egyptian building we know of, the temple at Tel-el-Yahoodeh, which depended upon glazed ware for much of its decoration, was built by the same Ramses III. who imitated Mesopotamian sculpture on the walls of his ugly temple at Medinet Abu, and Mesopotamian architecture in the neighbouring Pavilion. Chaldea is the country of glazed mural decorations. The very walls of Babylon are said to have been embellished with the representations of animals and the like, in bright colours upon glazed bricks. The successive stages of Mesopotamian zigguratts were usually decorated in order with the colours emblematic of the seven planets, and tiles may have been the colouring material employed. Sir A. H. Layard's discoveries at Nimroud show how elaborate were some of the painted tiles that decorated palace interiors. Similar revelations were made at Khorsabad, where sufficient remains of coloured brick

decoration were recovered from some of the harem chambers to give authority for a fair restoration of the general decorative scheme, with its imposing yellow lions, bulls, eagles, and the like, finely relieved against a blue ground and framed within a border of yellow and white rosettes. Bands of well-designed tile-decoration carried round the face of an arch show that, in Sargon's day at any rate, Assyrian architects had learned to give architectural value to that feature, apparently so despised in the ancient world. The Persians adopted Babylonian methods of wall decoration with glazed brick, as they adopted so much else that was Babylonian, and it is from the ruins of Susa (excavated by M. and Mme. Dieulafoy), that have come the best-known examples of this noble art, now so admirably set up in the Louvre. In the hands of Hellenistic and other workmen, their successors (Sassanian, Syrian, Egyptian, and Persian), the art was further developed, and continued down to modern times.

The crude brick walls of Mesopotamia were not dependent, for colour decoration, only upon the somewhat elaborate and expensive process of encasement in glazed tiles. They were doubtless more commonly embellished with a thin coating of stucco washed over with paint. Many remnants of this perishable kind of decoration have fortunately survived, and doubtless the earth hides many more. Nimroud has yielded a

beautiful example of such art, and we may safely conclude that it was widely employed to give to the chief buildings of Assyria and Chaldea that glory of colour for which the East seems always to crave.

Envious Time, that has robbed us of so much of the beauty of the past, has perhaps in nothing been more cruel than in accomplishing the almost total destruction of artistic textile fabrics. A few crude remnants of woven stuff have been rescued from the charred and drowned ruins of the lakedwellings of Central Europe. Egypt too has yielded up a great quantity of mummy-cloth, in some instances wonderfully fine. Specimens of elaborately woven tissues of the Roman and Byzantine periods have likewise been recovered from Coptic graves. But all these things taken together do not amount to much. Where are the carpets, the hangings, the splendid raiment of the Byzantine palaces and court? Where is the least trace of the priceless fabrics woven at Tyre and dyed in Tyrian purple? Who shall show us so much as a fragment of the robes of Solomon, arrayed in all his glory? How are we to arrive at a conception of the splendid stuffs that existed in profusion even so late as the times of the Sassanians? and if these are beyond us, how much more the fabrics that decorated the personages and the palaces of the courts of Assyria and Babylon! Yet nothing

is more certain than that embroidery of the most elaborate kind and carpets woven with artistic designs were constantly employed in Chaldea and Assyria from early times. Pliny refers to no modern invention when he says: 'Colores diversos picturæ intexere Babylon maxime celebravit et nomen imposuit' (N. H. viii. 74). Marduk-idin-akhi is represented on a stele in the British Museum as robed from head to foot in garments embroidered all over, and the most ancient Chaldean cylinders prove that this was, even in their day, the custom of the wealthy. Fortunately, Assyrian bas-reliefs have preserved for us the general aspect of some of the state costumes worn by the kings of Assyria, and thus we are enabled to affirm that embroidery was employed not merely in simple lines and geometrical patterns, but to give effect to designs of much grace and complexity, wherein were included winged genii, trees-of-life, and all the other typical subjects which we find carved upon Assyrian walls. The effect of commerce and the chances of war would doubtless be to spread such materials abroad in the courts of the West. The kings of those days were eager to acquire objects of personal adornment, and if the finest embroideries were made in Babylon, Babylonian work would be most sought after. By this means the principles of Chaldean design, and such motives as winged genii, rosettes, battlement

borders, and the like, might be carried to distant places, there to become objects of wonder, or even of imitation. India, when she first appears in history and down to the present day, has always been a chief home of the textile industries. Bearing in mind the commercial connection, which seems from the earliest times to have linked India and Chaldea together, this fact is specially noteworthy. Shall we ever know which country was earliest in giving artistic development to the crafts of the weaver and the needlewoman? Our present knowledge fails to throw any light on the question.

Objects made in gold, lead, iron, copper, and bronze, found in the oldest Chaldean tombs, show how early the Chaldeans learnt to work the chief metals. Bronze implements of use and decorated objects of luxury were made by them probably at a time when metal-work elsewhere was only in its crudest beginnings. Assyria, situated closer than the Chaldean low country to the metalliferous mountains, may well have been a very early centre of this industry, and not improbably owed its political development to the metallurgic skill of its people. It was in Assyria that iron, considered precious by the ancient Chaldeans and used only for ornament, became the chief metal for the manufacture of tools and weapons. The wealth of Assyria was probably as

much due to the export of metal manufactures as to military power resulting from the possession of the best weapons in the world at the time. The famous remains of the Balawat gates, in the British Museum, show to how high a point of development the craftsmen of Mesopotamia carried artistic metalwork; nor are there lacking fragments of bronze furniture-fittings, vase-handles, and what not, to confirm their evidence. The Phœnicians in due season imitated their Oriental masters in this art, as in all others that it paid them to traffic in with the peoples of the West, and so Mesopotamian principles of design were spread abroad. Sidonian merchants carried the influences of Assyrian art to Cyprus and the shores of the Ægean, and Phœnician dishes of Assyrian type have even been yielded by the tombs of the ancient peoples of Italy.

We have spoken of the luxury of the palaces of the kings of Babylon and Assyria. When the sovereign went to war it is not to be supposed that he utterly left this luxury behind him. Many indications exist to prove that the camp life of an Assyrian king was marked by much elaboration of circumstance. It may well be imagined that his tents were bright with many-coloured hangings, and carpeted with the choicest produce of Babylonian looms. The same would be, to a less extent, true of the tents of

his chief officers and courtiers. Assyrian bas-reliefs preserve for us the form of the tents themselves, and lead us to suspect that they may have had an influence on the development of architecture. suffice to mention that wooden poles, bound about above and below with metal bands, the ends of which were decoratively curled into spirals, were used as their supports. This form of pole originated in Chaldea, and is represented as constituting part of a tent-like canopy over a god in a very early Chaldean bas-relief in the British Museum. Such pavilions seem to have been much used both in Chaldea and Assyria, and the annual campaigns of the Assyrian armies must have familiarised the peoples of the surrounding countries with their appearance. We know from Assyrian bas-reliefs that permanent buildings were made in imitation of these portable pavilions, and ultimately stone columns and capitals were formed after the fashion which wood and metal had dictated. The Ionic capital of later days was only a further development of this type, and so, once again, we perceive a main feature of stone architecture to have arisen from copying in stone forms designed to suit the qualities of another material.

Over these and the like details we cannot, however, afford to pause; the reader will find them discussed at length in the classic works on ancient Oriental art.

It is less important for us to catalogue the details of Chaldean art-tradition, which were borrowed by this and the other nation of the East or West, than to consider by what agencies the radiation of Chaldean influence was spread abroad over so large a portion of the world. Such facts as that the Egyptians of the New Empire took to employing pairs of animals face to face as a motive of decoration, or that traces of the numerical system of Babylon are found imbedded in the early Teutonic languages, are only important as manifesting the wide extension of Chaldean influence and the moulding force exerted by it upon the art, and, therefore, also upon the whole civilisation, of contemporary or later nations. We have already shown how the ideal of living strength of the Chaldeo-Assyrian school of art was suited for wide assimilation, and we have noted the importance of the central and accessible position of Babylonia and Assyria for spreading that ideal. We have now briefly to point out, in conclusion, how political conditions worked towards the same end

Bearing in mind that, at such dates as from five to two thousand years before Christ, nations armed with metal tools and weapons, and acquainted with methods of working metals, could not fail to be the centres of political power and of a spreading civilisation, we might almost be surprised not to find worldempire sooner falling to the share of either Egypt or Babylon. The hindrance to such a result was doubtless the natural law which decrees that human development shall only result from a succession of ideals—a succession, as it were, of births, each the offspring of a double parentage; so that no single power or civilising unit can ever dominate the world, seeing that, when remaining alone, it is condemned to sterility, and only by combination with others can it cause advance. The contacts and rivalries of Chaldeans, Egyptians, Elamites, Assyrians, Hittites, Phænicians, and the rest, married local ideals together, and enabled births of successive generations of ideals and the evolution of civilisation.

The ancient world, when we first know anything about it, seems to have been the home of a number of small tribes, each owning a little territory—a village and the surrounding land—and each being practically independent of another, though many were after a fashion allied together by ties of kindred. We can dimly perceive that by a process of concentration, accompanied by plenty of fighting, such tribes gradually gathered into small kingdoms. Upper Egypt, Lower Egypt, Shumir, Accad, Elam, and the like, were such nuclei of political organisation whose early existence we can faintly perceive. The deepest stratum to which history has yet penetrated

overlay this stage, and the first historical period manifests to us the union of kingdoms into still larger governments. Upper and Lower Egypt were united under a single governor before the year 4000 B.C., and it seems probable that then contemporary Chaldea, though like Egypt preserving the tribal organisation as an internal structure, was already organised into a single State. It was in these States that the work of nation-making went on. Various races were welded together in them into nations of distinct individuality. Broadly speaking, it is true to say that this was the work of the fourth and third millenniums before Christ. Throughout the whole of that time it is useless to look for imperial powers. The co-operation and subordination of men were only so far organised as to enable a relatively small tract of country to be administered for the common good of its inhabitants, and even that was only possible when the parts of the country were linked together by a navigable river. Civilisation arose in river-basins, not so much because of the fertility of the lands, but because the river enabled local interests to be subordinated to general needs.

When we approach the year 2300 B.C., we may consider that the consolidation of tribes into kingdoms, and the rudimentary organisation of those kingdoms for attack and defence, had taken place as

far as the most advanced area of the world was concerned. We thus approach the age of empires and conquests. Elam seems to have been the first imperial power. About 2300 B.C. Elam went forth conquering and to conquer. She captured all Chaidea, and spread her power westward almost to the shores of the Levant. This was no mere plundering raid, but apparently a great movement of organised warfare and annexation, accompanied by much moving of peoples. It was in this epoch that the Phœnicians settled on the shores of the Mediterranean and the Hyksos conquered Egypt. The Hittites may have advanced along the same wave of movement, and perhaps the Etruscans themselves were carried forward by it. The Elamite ascendancy lasted for some three hundred years. During this period the science of government began to be developed, and rulers learnt in rudimentary fashion how to govern a conquered people and to administer a conquered province. Perhaps it was at this time that the method was invented of carrying whole peoples captive and moving them from one country to another, a method which did more in its day for the mingling together and developing of mankind than any other.

Babylon was the first to reassert her local independence. About 2000 B.C. Hammurabi raised her

from subjection and made her the centre of a new national activity. The Hittites must have begun their stage of expansion about the same time, and the Phœnicians, under the leadership of Sidon, cannot have been far behind. It was not till 1662 B.C., or thereabouts, that the chiefs of Upper Egypt were able to expel the hated foreigners from the lower country, and to unite both Egypts again under a government free from foreign control. The tide of conquest was now turned backwards. Egypt took the leading rôle. She carried her victorious arms southwards into the heart of Africa. She annexed once more the country at the head of the Red Sea. She conquered, and for a long time held a great part of Syria, and her armies were victorious as far as the banks of the Euphrates. The kings of the eighteenth dynasty were the heroes of this great achievement, and if the name of any one of them is to be especially remembered in connection with it, let it be the name of the great general Dhutmes III. (Thothmes), conqueror at Megiddo, whose bodily remains, yet preserving somewhat of majesty, are kept under glass in the Gizeh Museum to tickle the flippant wit of tourists. The tablets recovered from Tel-el-Amarna enable us to form a slight idea of the organisation of this large empire. They prove that the rudiments of governmental machinery already existed. Such as

they were, they sufficed to hold the empire together, with some fluctuations of size, for five centuries or more.

Whilst Egypt was thus taking the lead, and was governing an important area of the world, other countries were likewise steadily advancing. In the Mediterranean the maritime peoples were becoming civilised and strong. The Ægean was the home of a powerful confederation. The Phœnicians were increasing their power westwards. The Hittites were extending their sway over northern Syria, and perhaps into the heart of Asia Minor. The peoples of Sardinia and Italy appear not to have been far behind in the race. In the fertile lands between the Tigris and the Zagros mountains the kingdom of Assyria was already existent, though it gave little indication of the greatness that the future had in store for it. Shalmanezer I, founded Kaleh in the thirteenth century, and his son made a victorious expedition against Babylon about the year 1300 B.C.

During the twelfth century the pendulum began to swing in the opposite direction. Authority left Egypt, and tended thenceforward to pass into the hands of her rivals. About the year 1100 B.C. the foundation of Gades marked the approaching culmination of Phœnician power. Tiglath-Pileser I., the first Assyrian monarch whose authority stretched from the sources of the Tigris to the shores of the Persian

Gulf, reigned about the same time (circa B.C. 1120-1100). After him, indeed, there is an historical blank of about two hundred years; but he was the herald of the future greatness of his country. During these two centuries the Hittite power began to fail in Syria, and that of the Aramæans increased; Tyre supplanted Sidon as Phænician leader; and the Jews became strong under David and Solomon (mid-tenth century B.C.).

At length (B.C. 884-860) Assurnazirpal, king of Assyria, appeared upon the scene and inaugurated a new era of conquest. He made raids in various directions, and enlarged the territory of his kingdom and its wealth. Shalmanezer II. (B.C. 860-824) and the other monarchs of this dynasty, repeatedly invaded with victorious result the kingdoms of Syria and the cities of the West, as well as other countries to the north and east. They received tribute from Phœnicians, Jews, proto-Armenians, Chaldeans, and even the Medes, whose name first appears in an inscription of Râman-nirari III. Ultimately the dynasty was worn out while Assyria was still in the heyday of her strength. The usurper, Tiglath-Pileser II. (745-727 B.C.), carried her to the front again. hands and those of his immediate successors, governmental centralisation was made a settled policy. Conquered districts were, if possible, annexed, not merely

devastated and plundered. Thus the bonds by which neighbouring districts were held to Assyria were strengthened, and new areas were added to those over which Assyrian influence extended. Meanwhile Egypt was becoming continuously weaker, and was even for a time conquered and governed by a dynasty of the 'vile Kush' of Ethiopia. This court was a hot-bed of anti-Oriental intrigue. In due time Sargon (722-705 B.C.) met and defeated the armies of Egypt. His son, Sennacherib (705-681 B.C.), maintained this advantage of the East over the West; but it was reserved for Esarhaddon (681-668 B.C.) to actually conquer Egypt, and reduce it to the position of a kingdom dependent upon Assyria. It was now that the power of Assyria culminated. Nineveh ruled at this time from the Persian Gulf to the Levant. The chiefs of Cyprus and the kings of Lydia did homage to her power. All the neighbouring hill-countries to the north, all the districts of Syria, the tribes of Arabia, and perhaps the people of Nejd and Yemen, as well as the inhabitants of the Nile valley, were governed more or less directly by the mighty king of Assyria.

But a new spirit was already abroad in the world, and great changes were at hand. The peoples of the mountainous regions to the north were developing, and their development presaged the end of Assyrian supremacy. Assurbanipal (668-626 B.C.) felt his kingdom totter, and his successors beheld it fall (606 B.C.), and the pride of Nineveh for ever humbled in the dust. A great Scythian invasion, which swept out from Asia, covered Asia Minor, and perhaps even for a time engulfed Assyria, was the agent that shattered the imperial power. The rest of the work of destruction was done when a coalition of Babylonian and Median armies attacked Assyria, and captured Nineveh after a two years' siege.

About this time Egypt enjoyed a period of repose, and under the famous twenty-sixth dynasty her native art and civilisation experienced a short but brilliant renascence. It was now that Greek settlers obtained a firm and recognised footing in the Delta, and that the commercial connection between Egypt and the Greeks received so considerable a development. Pharaoh Neco even made a successful Syrian campaign, and held the country for three years. triumph was but short-lived. For a time the Eastern power had been crippled, but it presently appeared that the failure was but temporary, and merely marked the transference of the centre of authority eastwards. Babylon, under the leadership of Nebuchadnezzar, soon asserted her pre-eminence; the Egyptian armies were defeated at the battle of Carchemish (605 B.C.); Jerusalem and Tyre were

besieged, both eventually taken (586 or 585 B.C.); and Egypt was overrun (B.C. 568). Then it became Babylon's turn to fail, and the star of the Medes and Persians appeared in the ascendant. Persia on the one hand; Lydia, Babylon, and Egypt on the other: such were the powers that faced one another. The Medes and Persians, under the leadership of Cyrus (550 B.C.) and his son Cambyses (529 B.C.), conquered their opponents and brought them within the bounds of an empire larger and better organised than any that had preceded it. It lasted about two centuries, and then fell before the conquering and organising genius of Alexander the Great. Thus the torch of empire, illuminating ever wider areas, and borne with increasing steadfastness, was passed on from hand to hand-from Elam to Egypt, from Egypt to Assyria, from Assyria to Babylon, from Babylon to Persia, from Persia to Macedonia-till ultimately it was caught up and for so many centuries held by all-conquering Rome, who inherited the bravery and the governmental skill of all her predecessors, and became the schoolmistress teaching law and orderly living to all succeeding nations and generations of men.

From this rapid sketch of the course of events in the ancient world it becomes evident why Egypt contributed relatively so little and Chaldea so much to the art-traditions of the world. The tide of advancing

civilisation could not but follow the great trade-route which led from the Persian Gulf to the Levant. At one end of this trade-route were the Chaldeans and at the other end the Phœnicians, both being seafarers. This trade-route left Egypt on one side. At no time did Egypt control it. Her raids and annexations in Syria had no such purpose in view. It appears to have been the Assyrians who made the holding of this trade-route a part of their fixed policy. That accounted for their continual fighting with the peoples at each end of it for control over them. whilst they were content merely to frighten and keep back the peoples who flanked the route, and could come down plundering upon it. What Assyria had done Babylon continued. The world had then learnt its lesson. The kings of the twenty-sixth Egyptian dynasty, during their short tenure of power, directed their policy in accordance with the interests of commerce. Hence it was that the art of the Egyptian Renascence did in fact for a time produce no inconsiderable influence upon the maritime peoples of the Mediterranean. Meanwhile another and most important trade-route had been developed in the north, connecting the table-land of Iran with the Black Sea. Greece controlled one end of it, just as Phœnicia controlled one end of the Euphrates valley route. But Persia was completely impregnated from the earliest times with Chaldean influence, and so by this route also Chaldean traditions were carried westwards.

Thus we find here, as in all other cases, that the history of art is merely a function of political and social history. The main physical features of the earth's surface determine the ebb and flow of population, and afford at different times and under different conditions wealth and supremacy to this race and the other that chances among them. Civilisation thus takes on many forms, and art is a part of it; now developing in the hands of an advancing race, now failing in those of one whose day is passed. Regarded thus, art history is an exponent—nay, is the clearest and most certain exponent-of human development. By means of it the eye can be educated to perceive in some trifling fragment of carved stone or hammered brass the traces of world-movements that have shattered nations and destroyed empires.

CHAPTER VI.

THE HEIRS OF CHALDEA.

I N the preceding chapter Assyrian art has been treated as a mere branch of the art of Chaldea. Such indeed it appears to have been. But we must bear in mind that the population of the countries of the alluvial Tigris and Euphrates plain was not homogeneous with that of Assyria. Assyria was only in part colonised from the lower country; and the Assyrian and Chaldean peoples were formed out of different ethnical mixtures. Assyria therefore must be counted the first-born son of Chaldea. If Chaldea had preserved for us a larger number of monuments we should have been able to trace the development of the domestic style of art upon Chaldean soil. But, as things are, we are forced to call Assyria in to witness to the nature of the contemporary development of the Chaldean style, instead of treating the history of art in Assyria as the history of a dependent or derived school.

When discussing Egyptian art we took occasion

to notice how, during the eighteenth and nineteenth Egyptian dynasties-that is to say, before Assyria had emerged from obscurity—the influence of the Chaldean style was felt and manifested by Egyptian artists. It is greatly to be hoped that the progress of investigation may hereafter enable us to define the nature and amount of this influence with more clearness than is yet possible. We perceive that many of the characteristic differences between the art of the New and Middle Empires are due to the introduction of an Asiatic element. Composite animals such as the Sphinx were unknown before the time of the New Empire. It is more than probable that if we could recover some Egyptian palace of the later period we should find in it a likeness to the contemporary royal residences of Chaldea. As has before been hinted, it seems more than possible that the degradation of Egyptian architecture, which began towards the end of the reign of the eighteenth dynasty, was an evil effect of Oriental influence transcending its proper domain

If Egypt at the height of her power was thus sensitive to the Oriental ideal, it is not difficult to imagine how overwhelming must have been its effect upon less developed and less geographically distant peoples. A few years hence we shall doubtless be able to speak with more certainty about these matters,

but the outlines of future knowledge are already drawn. The east and south coasts of Arabia and the fertile central plateau, now called Nejd, must have been inhabited at an early period by people not far behind the great nations in civilisation. No ancient monuments have yet been described in these regions, but we gather from early inscriptions that as far back as 3000 B.C. Arabia was the home of organised government. Arabian civilisation must have been influenced from the first both by Egypt and Assyria, and if at a vastly later date we find in Arabia rockcut monuments (like those at Medáin Sâlih) wherein Egyptian and Oriental traditions are mingled, it is practically certain that a similar mixture of foreign elements was characteristic of earlier periods in the same locality. The Bedawin of the desert between Nejd and Mesopotamia contributed an important element to the Chaldean race, and doubtless acted as a medium of commercial and intellectual communication between the sand-girt island of central Arabia and the plains of Shinar. The much-navigating Chaldeans would, of course, be in constant communication with the Arabian coast-regions, and thus Chaldean influence cannot but have been spread both around and across the land of Arabia.

It is probably hopeless to expect ever to learn much about any ancient traffic between India and the commercial cities of the Persian Gulf. That such traffic did exist can scarcely be doubted. The stitched vessels of the Persian Gulf continued in use down to a recent time.¹ They are thus described by Marco Polo.

'Their ships are wretched affairs, and many of them get lost; for they have no iron fastenings, and are only stitched together with twine made from the husk of the Indian nut. They beat this husk until it becomes like horse-hair, and from that they spin twine, and with this stitch the planks of the ships together. It keeps well, and is not corroded by the sea-water, but it will not stand well in a storm. The ships are not pitched, but are rubbed with fish-oil. They have one mast, one sail, and one rudder, and have no deck, but only a cover spread over the cargo when loaded. This cover consists of hides, and on the top of these hides they put the horses which they take to India for sale. They have no iron to make nails of, and for this reason they use only wooden trenails in their shipbuilding, and then stitch the planks with twine.' Such boats must have been devised in neolithic days, and doubtless in the like of them ancient Chaldean seamen laid the foundations of the world's commerce, and kept India in touch with Babylonian markets.

¹ See Yule's Marco Polo, i. 102, 109.

Eastward of Chaldea were the uplands of Elam, to which we have already so frequently referred. The connection between Elam and Mesopotamia was at all times close. There was in both countries a kindred element of population from prehistoric times. Whatever Chaldea may in the first instance have borrowed from Elam, she ultimately repaid a hundred-fold. Elamites, Medes, and Persians took their writing, their civilisation, and their art from the cities of the plain. Through Elam passed that great trade-route from Central Asia whose importance we are only just beginning to realise. We can vaguely perceive that Chaldean influences overspread all the regions of what was afterwards Persia at a date considerably earlier than 2000 B.C. By that time the foremost tribes of Central Asia, inhabiting perhaps the fertile valleys of the Oxus and Jaxartes, owned all the elements of the kind of civilisation which Chaldea had then carried to the furthest point. Modern investigation has shown that the 'Hundred Families,' the Pi-Sing, who introduced civilisation into China, were an offshoot of the Bak tribes, dwelling west of the high Pamir plateau. carried to China the Chaldean method of writing and the Accadian names for the points of the compass, for government officials, for sacrifice and ritual observances, and for the objects and methods of astrology and divination. In fact, they took the civilisation of Chaldea to China, and thereby founded a new civilisation in the furthest East.

If Chaldea was thus potent across the whole vast continent of Asia, it is not surprising to find that her ascendancy over her immediate neighbours was Media and Persia did not emerge from complete. obscurity till a late date; but when that emergence took place, when under Cyrus they conquered and for two centuries administered the Western Orient, they did but attempt to reproduce in their capital cities the glories of Babylon and the luxury and magnificence of Nineveh. Persian writing was a variety of the wedge script. All the conventions of Persian art were borrowed from Mesopotamia, though a few Egyptian forms were added. The excavated ruins of Susa and Persepolis have only served to repeat with added emphasis the lesson taught by Phœnicia and Greece, that it is to the plains of Shumer and Accad that we must look for the centre of the civilising force that first availed to tame the world

Passing westwards to the head-waters of the Tigris, where, in the hill country about Lakes Van and Urumieh, the proto-Armenians dwelt in the time of the Assyrian hegemony, we find the same ubiquitous system of writing scored upon the rocks, and

the same artistic conventions perpetuated in basreliefs. Van imitated Nineveh as Nineveh imitated Babylon; and, had not impassable mountains intervened, Chaldean traditions would assuredly have spread northwards along this route also.

If we transfer our observation to the banks of the Euphrates, and trace that river upwards along its beneficent course, we shall find the same state of things maintained. Here, between the river and the Levant, was the centre of Hittite power at the time of its culmination, which was simultaneous with the culmination of Egypt. The Hittites, as we have before remarked, may well have formed part of that great human wave which passed westwards at least as early as the third millennium before Christ. They had a form of hieroglyphic writing which was not derived from the script either of Egypt or Chaldea, though all three may have been offshoots of the same primal root. The beginnings of Hittite civilisation must, therefore, have been very ancient. Future discoveries may possibly prove that other and more famous systems of writing, the Cypriote for instance, were derived from the Hittites. It is clear that these tribes were not of a Semitic stock. Nevertheless they experienced the influence of Chaldea, as their art plainly testifies. At present we perceive them but dimly, standing as they do upon the misty verges of history. Egypt fought them, and did but divide the honours of the combat. At a later time the Hittites had to yield to the might of Assyria; but before that took place the centre of their power had been transferred westwards. They had conquered and overrun Asia Minor. They left their mark on the slopes of Taurus, by the banks of Halys, and even on the far-distant margin of the Ægean Sea. Their sculptured bas-reliefs are unfortunately few in number. Such as they are, however, they manifest an original ideal, influenced by, but not derived from, the Egyptian and Chaldean. There are traces in it of a direct contact with nature, of an original manner of looking at nature, which may not have been without influence upon Ionian, and thereby upon early Greek art. Ephesus was originally a Hittite settlement. Ephesian Artemis was the transformed Hittite goddess Atargatis, herself in turn derived from the same origin as Ishtar of Babylon and Ashtoreth of the Phœnicians. The ancient Hittite founders of civilisation in Asia Minor appear as the Amazons in Greek tradition. It was in Lydia that that civilisation attained its latest developments. Hittites, or rather people possessing a civilisation of the type we now call Hittite, met the maritime Greeks on the shores of the Ægean somewhere about 1000 B.C. Two centuries or more later an Aryan

people, whose kindred remained behind in Thrace, crossed the Bosporus and supplanted the older race in Phrygia. These were the Phrygians of the historic period. Their art has been the subject of much recent research, not always recorded in the most lucid manner. It is an extremely important art, because in it we find a remarkable mixture of traditions and continuing influences derived apparently both from East and West, and its influence upon Greek art is known to have been considerable.

We have thus reached the shores of the Ægean, but before entering upon its waters we must turn back and bestow attention upon the Phœnician inhabitants of the east coast of the Levant. Their influence upon the development of art is, I am convinced, consistently overrated. Ancient tradition and the excavations of Mr. Theodore Bent alike point to the Bahrein Islands in the Persian Gulf as an early home of this people. It is possible enough that the dwellers in the lands known to the Egyptians as Punt—that is to say, the regions on either shore of the Arabian Gulf-were of the same kindred. The date at which they arrived on the Syrian coast is not known, but it appears to have been about 2000 B.C. By what route they came is likewise un-They were an unpleasant and inartistic race, wholly given up to manufacture and trade;

willing enough for piracy or slave-hunting, but not otherwise fond of war; above all things commercially enterprising and clever. The world owes them no inconsiderable debt. They developed a system of municipal government which other nations borrowed. They made all manner of industrial inventions, especially in matters of metal-working, mining, and perhaps dyeing. It is usual to ascribe to them the simplification of previous systems of writing to a mere alphabetic form. Doubtless they developed to some extent the conventions of trade, moneylending, and the like, for which, however, we are chiefly indebted to Babylon. In fact, the Phœnicians did a number of useful but for the most part unlovely things. They made plenty of human sacrifices, they indulged in periodic religious festivals of the vilest sort, they sprinkled the Mediterranean over with centres of debauchery dignified under the name of temples, and for a time they did the carrying-trade for the Western world and became very rich in consequence.

It was usual to assume that Mediterranean civilisation began with the Phœnicians. The Greeks and benighted peoples of the West were all believed to have derived their first ideas of art from Phœnician imports. But it now appears that the Mediterranean may not, after all, have been so far behind its Eastern neighbours as this would imply. There were

maritime folk in the Mediterranean before the coming of the Phœnicians, and it seems likely, as we shall find, that some of these maritime folk were brought in contact with Egypt at an early date. Such art, therefore, as the Phœnicians practised, was not necessarily the seed of all the arts of the West. Oriental arttraditions reached Ionian shores without Phœnician help. Still the Phœnicians as carriers did convey to Western markets works of art, or things professing to be such, and so it becomes interesting to inquire of what nature these works were.

Phænician cargoes were doubtless mainly composed of objects of utility, the woven and other produce of the workshops of Phænician cities. The metal work they took for barter must oftenest have been in the form of tools or weapons, or at most vases or ornaments for the person made of gold or other precious metal. They, of course, bartered with Egypt, and so came to deal in Egyptian goods, which were invariably embellished with decoration. The home markets of Phænicia were likewise filled with Chaldean and other Oriental products. The glorious woven fabrics of Babylon must have been imitated by Tyrian looms and needles. Probably enough it was Phænician ships that carried Qede beer to Egypt, from the breweries of south-east Asia Minor in Ramesside days.¹ One

¹ Erman's Ægypten, p. 270.

way and another the great Phœnician cities must always have contained plenty of the beautifully made and decorated goods of both Egyptian and Chaldean manufacture. Their connection with the East was, of course, a much closer one than their connection with Egypt, for their kindred lived eastwards, and their religion and civilisation were thoroughly Oriental. Hence it came naturally to pass that when they took in hand to decorate any object of their own manufacture, they, being themselves wholly lacking in decorative invention, were content to copy the decoration from some Egyptian or Oriental object. And their copying was not done either skilfully or with good feeling, but blunderingly, and in such a spirit as might, now-a-days, be expected in an average Anglo-Saxon mechanic.

The best Phœnician decorative work we know of is exemplified by the vases and dishes of metal which have been found in Assyrian ruins as well as on several Mediterranean sites. The elements of the decoration have been borrowed from Egypt and Assyria, and impartially mingled together. The makers of these dishes probably meant them to be mistaken for Mesopotamian or Egyptian manufacture. The ancients were not above making colourable imitations of other people's work. That very beer of Qede, for instance, was forged by Egyptian brewers.

Probably enough the pushing Phœnicians sold imitations of whatever there was demand for. Like modern Birmingham, they may even have done business in idols; but an idol has always to be made in the style of art understood of the purchaser, not in the style of the country of the seller. Pottery mannikins of a rude sort, and now and then a bronze figure of no artistic merit were about all the sculpture that the ships of Tarshish can have carried to the West. All Phœnician art, that we know of, was bad, because it was made not to be admired by cultivated men, but to be sold to the less cultivated. But bad art, being necessarily dead, can engender nothing. The folk with whom the Phœnicians traded may by their agency have been brought in contact with certain forms and conventions of decorative treatment, but they cannot have been impregnated by Phœnician traders with the idea of art. Artistic strivings and ideals must have been awakened in the Mediterranean peoples by some other agency or set of agencies. It remains for us, in conclusion, to attempt to point out what they were or may have been.

The excavations of Mr. Flinders Petrie¹ in Egypt, supplementing those of Dr. Schliemann on various Ægean sites, have proved that civilisation of an advanced character existed in the islands of the ¹ See Mr. Petrie's most important article in the Hellenic Journal, vol. xi.

Mediterranean in the middle of the second millennium before Christ, and probably still earlier. One of Egypt's most constant enemies was a confederation of Libyan tribes with maritime peoples from the north shores and islands of the Mediterranean. Egypt at her culminating period stood between the Libyan league on the one hand, and the Hittite league on the other. The Libyan league was already strong in the time of Amenhotep III., and included the maritime contingent. It is, therefore, not surprising to find in a Mycenæ tomb of this period a piece of Egyptian ware bearing the cartouche of Amenhotep. Much discussion has taken place as to the particular districts and islands which, at different times, sent contingents to the naval expeditions of the league. Broadly speaking, we seem justified in concluding that Cyprus, the south coast of Asia Minor, Crete, the shores and islands of the Ægean, Sicily, Sardinia, Etruria, and other Italian regions, were represented at different times, and may at any rate be counted as having been all alike at a remote period the homes of a kind of civilisation that was neither Egyptian nor Chaldean, but was peculiar to themselves. tion therefore and maritime activity cannot possibly have owed their westward introduction to Phœnician activity. The Mediterranean must have been navigated by ships before ever the Phœnicians gazed upon

its waters. The Phoenicians in their turn did the carrying-trade between Egypt and Ægean ports, but that trade originated in pre-Phœnician days. after it will probably be proved that many of the pots recovered alike from Cypriote, Ægean, and Italic sites were actually made on the soil of Egypt and exported to those places. But they were not exported to a set of savages, who could have had no use for them. They were taken in exchange for something which it must have required organisation to collect and prepare. The neolithic civilisation of the West developed along its own local lines. When bronze was introduced the development continued its steady progress, and a distinct Western type of culture was thus evolved. There is no reason for believing that Egypt was far in advance of the rest of the Mediter-The Egyptian soil preserves what the ranean basin. climates of other countries destroy. The Mediterranean peoples may not have reached quite the same stage of advance as the Egyptians at the time of the Ancient Empire, but they were not necessarily far behind.

The early Mediterranean civilisation, of which we have been speaking, appears to have attained its fullest development on the shores and islands of the Ægean probably about the year 1500 B.C., or, at all events, at a point of time earlier than the culmination

of Phœnician power. The art of this period has been revealed to us by Schliemann and his followers. We find that it must rank alongside of the contemporary arts of Egypt and Chaldea; and that not as an art derived from them, but as one of essentially independent origin. Of course it felt the effect of Oriental influences, and of Egyptian influences too, as any independent art school might, but it was not like Phœnician art, a mere collection of borrowings and imitations. There was an independent Western ideal inspiring it. Such indications as I have, as yet, been able myself to trace seem to suggest that the Egyptian influence came first into the field, and that it consisted in the transfer of technical processes rather than of a set of artistic conventions. If we knew more about the art of the Hittites and Cappadocians in the second thousand years before Christ, we might find elements common to it, and the ancient art of the Ægean. The relics gathered from the lowest stratum at Hissarlik bear a close resemblance to work of the neolithic stage of industry in Europe. It is not till we reach the remains of the second city that Oriental influence makes itself strongly felt. This influence is found in the forms of many of the smaller objects discovered, and in the architecture. The plan of the palace and the form of the gates are Oriental. Still more is this true in the case of the

ruins of Tiryns, where the palace-plan is of wholly Oriental character. The domed tombs at Mycenæ were likewise of Oriental type-attempts to imitate, in stone, a style of building proper to constructions in clay, such as were habitually set up in Mesopotamia. The later we come down, the more clearly felt does Oriental influence make itself, and this because, down to the days of Alexander the Great, it was an abiding and even a growing factor in Western civilisation. The splendid pair of embossed gold cups, recently discovered upon Peloponnesian soil in the Vaphio tomb, may, perhaps, show traces of Oriental influence, but the traces are slight. art that is in them, and in that fine silver-lead head of an elk found by Schliemann in a Mycenæ tomb, as well as in the inlaid dagger likewise from Mycenæ and the remnants of wall-painting from Tiryns, is a powerful and an independent art, which owed helpful influence, no doubt, to contact with one and another foreign ideal, but which was not derived from any of the more famous schools known to us, nor from the mixture of their influences.

It seems probable that Etruscan art in its earliest stages was more closely allied to Ægean art than any other school. A few objects recovered from the lowest Hissarlik stratum present a peculiar similarity to certain later Etruscan types, and this is also true

of the pottery of the third city. Such indications do not, as yet, exist in sufficient number for us to be able to found a theory upon them, but, as far as they go, they are in harmony with the inherent probabilities of the case, and confirm us in looking for a school of Mediterranean art, and a Mediterranean civilisation born in the West, and, to a considerable extent, independent of Egyptian and Oriental influences.

It appears to have been the discovery of bronze which gave to the East a wonderful start in civilisation, and carried it for thousands of years ahead of the West. Nothing is more plain than that the knowledge of metals spread from the East, and that civilisation thenceforward followed the same lines. But before metals were known there was civilisation of another sort. As yet we have no reason for supposing that this civilisation did not exist as early, and was not as highly developed, in Europe as on any other continent. Navigation was born before the discovery of metals. The South Seas in historic time were navigated in their whole immense width by people in a polished-stone stage of industrial development. When, therefore, centres of bronzeusing civilisation arose in Chaldea and Egypt, and very soon afterwards in Syria, there may well have existed by the fertile shores of the Western Sea a

gifted and not unorganised folk ready to avail themselves of metals, as soon as they had the chance, and thenceforward to compete with their more fortunate and, for centuries, slightly more advanced contemporaries in the East.

CHAPTER VII.

THE CATS OF ANCIENT EGYPT.

It has been said with truth that one of the greatest triumphs of human perseverance is the domestication of the cat. No tame animal has lost less of its native dignity or maintained more of its ancient reserve. The domestic cat might rebel to-morrow. We could not reach it for capture, nor beat it into submission. We could only kill it if it did not consent to be harmless and to make itself at home. Nothing but the experience of countless generations of cats that they would not be harmed by man, can have produced the result we now universally observe. Where and when did this taming of the least tamable of animals take place? The monuments of ancient Egypt enable us to answer the question.

In prehistoric times the religion of the Egyptians was pure and simple Totemism. Probably in those days the inhabitants of Egypt were not united under

any common government, but consisted of a number of small tribes or clans, each of one kindred. Every such clan or kindred had its totem. The members of a totem clan commonly regard themselves as actually descended from the totem. If the totem (as is most frequently the case) is an animal, the savage will not, as a rule, kill nor eat it. On the contrary he venerates, and, to the eyes of civilised men, appears to worship it, though of course the whole conception of worship only arises at a more advanced stage of human development than that to which Totemism belongs.

The cat was the totem of some ancient Egyptian clan. Other clans venerated the bull, the crocodile, the hawk, the jackal, the cobra, the lizard, and so forth. Observation of existing totem-tribes in Africa, Australia, and elsewhere, shows us that one or more representatives of the totem are often fed or even kept alive in captivity by the tribe. Thus Mr. Frazer tells us that 'amongst the Narrinyeri, in South Australia, men of the snake clan sometimes catch snakes, pull out their teeth or sew up their mouths, and keep them as pets. In a pigeon clan of Samoa a pigeon was carefully kept and fed. Amongst the Kalang in Java, whose totem is the red dog, each family as a rule keeps one of these animals, which they will on no account allow to be struck or ill-used by any one.'

The ancient Egyptian cat clan doubtless treated cats as the Kalang treat red dogs.

But ancient Egypt did not remain for ever a disorganised assemblage of tribes. Thanks to warfare between clan and clan a nation was gradually welded together out of these savage units. In the main each clan settled down as a village. Some villages grew in importance, and became towns, dominating the surrounding districts. Now one town and now another (as the fortunes of war dictated) won the position of capital of the country. A victorious town tended to enforce universal respect for its particular totem. We conclude that at some time the cat tribe became the head of Egypt. At all events very early indeed the cat became a totem venerated all along the Nile. So also did the ibis, the hawk, the beetle, the asp, and other animals. Cicero says that no one ever heard of an Egyptian killing a cat; the remark might be made at the present day with almost equal truth. Herodotus relates that, when a fire occurred in Egypt, the people's first idea was to save the cats and to prevent them from leaping into the flames. But though cats were thus universally venerated, an especial reverence was paid to them in certain places, and of these Bubastis (in the Delta) was chief. Likely enough that city may have been founded in the night of the past by the prehistoric cat clan.

Not only were cats preserved from injury, respected, and petted during life, but they were buried with honour and mourned when dead. Many a parallel may be found to this custom of the ancient Egyptians. For instance, in Samoa, to quote once more from Mr. Frazer, 'If a man of the owl totem found a dead owl by the roadside, he would sit down and weep over it and beat his forehead with stones till the blood flowed. The bird would then be wrapped up and buried with as much ceremony as if it had been a human being.' The Egyptians' idea of respectable burial implied preliminary mummification. (According to their notion, a living man consisted of a body, a ka or ghost, a ba or soul, a shadow, and a 'luminous.' At death these component parts were broken up and set adrift. was believed that some day all of them would come together again and there would be a resurrection; this, however, could only happen if all the parts were preserved. Some of them might be destroyed by command of the infernal powers; that, of course, could not be prevented by surviving relatives. They could only help to keep the ka going. This ka, or ghost, seems to have been the element in which

¹ The Rabbins say that the human soul has five forms—Nephesh the bodily soul, Ruach the spirit, Neshama the more celestial soul, Chaja the life, Jechida the solitary.

the life was specially believed to reside. It was an impalpable double of the man's body; it was, in fact, the mediæval, or for that matter the modern, ghost. To keep it alive it had to be fed with the ghost of food, clothed in the ghost of clothing, and housed in the ghost of a house; it might be pleased and amused by the ghosts of luxuries and games, and served by the ghosts of slaves. The ingenuity of the ancient Egyptians may be measured by the fact that they not only invented the double, but found out how to supply it with all these things.

The ghost or double of a body (in ancient Egypt) had, however, to have a material something to be the double of. The actual body was, of course, best; second best was an image of it made in some lasting substance. Hence arose mummification to preserve the body, and portrait sculpture to replace it if destroyed. Such statues are called ka statues. If the mummy were destroyed, the ka could still be kept in existence by means of them. A rich man was mummied in costly style, had many ka statues, and was buried in an elaborate tomb; a poor man was merely dipped in bitumen, rolled in a few yards of common stuff, and hidden in the desert sand.

As with men, so with cats; they too had their ka and all the rest of it, and their ka had likewise to be kept from annihilation against the great day of

resurrection of cats, crocodiles, and men. A rich man's cat was elaborately mummied, wound round and round with stuff, and cunningly plaited over with linen ribbons dyed two different colours. His head was encased in a rough kind of papier maché, and that was covered with linen and painted, even gilt sometimes, the ears always carefully pricked up. The mummy might be enclosed in a bronze box with a bronze ka statue of the cat seated on the top. Even finer burial might await a particularly grand cat, as we shall presently see. A poor man's cat was rolled up in a simple lump, but the rolling was respectfully done, which is more than one can say about many a poor ancient Egyptian's body brought to light in these excavating days.

In very early times—that is to say, anywhere from four to ten thousand years before Christ—the Egyptian cat was the straightforward totem we have described. It is only fair to say that in the historical period he occupied a more ambiguous position. The Egyptians were not the stationary people they are vulgarly believed to have been. They developed now and again, when circumstances were favourable: altogether they developed a good deal. Their religion occupied much of their time and a remarkable share of the attention of their most educated class. It was far from being an unchanging, stereotyped religion.

It began as pure and simple Totemism coupled with ancestor worship. The gods were ranged by the side of the totems, and as there were tribal and afterwards local totems, so there came to be local gods. Each of these gods, whether home-made or of foreign importation, had a sacred animal attached to him. This animal was the totem he had supplanted. Out of the cats arose the goddess Pasht, the local goddess of the city which the Greeks called Bubastis, and whose modern successor we call Zagazig. Like the cats, the goddess Pasht came to be venerated all over Egypt. When the most important local gods (that is to say, the gods of the most powerful cities) were united into a national Egyptian pantheon, Pasht was amongst the number.

A local god or goddess might be without any particular character, but what would be the use of a pantheon of gods all one like another? Of course differences were marked amongst them. One became god of agriculture, another of death, and so on. Pasht, for her part, was lady of love, and corresponded in a crude sort of a way to that much nobler conception, the Aphrodite of the Greeks. She was represented as a woman with a cat's head. Another goddess, who can scarcely be differentiated from her, is the lioness-headed Sekhet.

Egypt possessed many temples to one or other

of these goddesses. First amongst them was the great temple of Bubastis, the ruins of which have so recently been laid bare. It was called by Herodotus the most pleasing of all the temples of Egypt. A festival of an exceedingly merry and immoral character was celebrated there to the yearly delight of thousands of Egyptians. Cat mummies and cat ka statues have been found in many parts of Egypt, but, till recently, ninety-nine out of a hundred of them came from Bubastis. In the summer of 1888, however, an enormous find of cats was made near Beni-Hasan - a place some hundred miles or so south of Cairo, and well known for its wonderful rock-cut tombs. That an important cats' buryingplace would exist somewhere thereabouts might have been predicted from the fact that a rock-cut temple, the famous Speos Artemidos, exists in the immediate neighbourhood, and this temple was dedicated to Pasht. Cats must, therefore, have been specially venerated in the ancient city.

The plain on the east bank of the Nile at Beni-Hasan is about a mile wide. It is bounded by a range of precipitous hills. A flat-bottomed side valley opens eastward through the hills at this point. The traveller mounting his donkey at the modern village rides for about half a mile across cultivated land, and for another half mile across desert, passing

on the way first the modern human burying-place, and shortly afterwards the ancient cemetery of the cats. He then enters the side valley (whose steep walls and floor are barren as the moon), and after advancing up it about a quarter of a mile he finds the façade of the artificial cave-temple, the Speos Artemidos, conspicuous at the base of the mountain on his right hand.

It is the simplest conceivable piece of rock-cut architecture. The slope of the hill is squared up vertically for a front. An open portico, consisting originally of two rows of four piers each, is, with the roof which they support, cut out of the solid limestone rock. A short narrow passage leads thence straight into the hill to an oblong chamber. A raised niche cut in the far wall opposite the entrance was the actual shrine of the goddess. A figure of Pasht was sculptured on one side of this niche, and another was painted on the other side. The temple was probably cut out of the hill in very ancient times, for it closely resembles the neighbouring twelfth dynasty tombs. Hatasu (of the eighteenth dynasty) inscribed her name upon it, but her successor, Thothmes III., had that erased and his own substituted. Seti I., the father of Ramses II., added some decorative sculpture. Such was the home of the great cat of the district, for in all these temples a representative of the totem class was kept in honour. Doubtless the head cat of Pasht's temple was a very grand cat indeed. She would live a life of dignified luxury, and dying she would be buried with royal magnificence.

For three or four thousand years the cat-mummies of Beni-Hasan lay undisturbed, awaiting the resurrection; now a resurrection has come to them, but other than they looked forward to. The archangel that heralded it was an Egyptian fellah from the neighbouring village. By some chance one day this genius dug a hole, somewhere in the level floor of the desert, and struck—cats! Not one or two here and there, but dozens, hundreds, hundreds of thousands, a layer of them, a stratum thicker than most coal-seams in a series of pits ten to twenty cats deep, mummy squeezed against mummy tight as herrings in a barrel. The discovery meant wealth for somebody, probably not the finder, but the head-man of the village. A systematic exploration of the pits was undertaken. The surface sand was stripped off, and the cats were laid bare. All sorts and conditions of them then appeared—the commoner sort caked together in black lumps, out of which here a grinning face, there a furry paw, or a backbone or row of ribs of some ancient puss, stood prominently forth. The better cats and kittens emerged in astonishing numbers, and with all their wrappings as fresh as if they had been put into the ground a week, and not thirty centuries before. Now and again an elaborately plaited mummy turned up; still more rarely one with a gilded face (of such I myself found three lying about). As far as I can learn only three cat ka statues have as yet been found. Two of these are small bronze figures. The third is a life-size bronze, a hollow casting, inside which the actual cat was buried. One or more bronze statuettes of Osiris, god of the dead, were likewise (I believe) found among the cats. All these objects are in the author's possession.

The plundering of the cemetery was a sight to see, but one had to stand well to windward. The village children came from day to day and provided themselves with the most attractive mummies they could find. These they took down to the river bank to sell for the smallest coin to passing travellers. Often they took to playing or fighting together with them on the way, and then the ancient fur began to fly as for three thousand years it had never been called upon to do. The path became strewn with mummy cloth and bits of cats' skulls and bones and fur in horrid profusion, and the wind blew the fragments about and carried the stink afar. This was only the illicit part of the business. The bulk of the old totems went another way. Some contractor came along and offered so much a pound for their

bones to make into something—soap or tooth-powder, I dare say, or even paint. So men went systematically to work, peeled cat after cat of its wrappings, stripped off the brittle fur, and piled the bones in black heaps a yard or more high, looking from the distance like a kind of rotting haycocks scattered on the sandy plain. The rags and other refuse, it appears, make excellent manure, and donkey loads of them were carried off to the fields to serve that useful, if unromantic, purpose.

It cannot be too much regretted that no responsible Egyptologist watched the excavation of this extraordinary burying-place. The fellahin were left to do it after their own fashion. Fortunately they know that every 'antica' has a money value, and these, therefore, they hoard for sale. But no record as to how they were buried is forthcoming. The life-size bronze cat, for instance, is a most remarkable creature. It must have been buried in a box, on which, doubtless, some inscription was painted, but no box was preserved, nor could I get any exact information as to how, when, where, or by whom the cat was taken out of the ground. The same was also the case with the two small bronze cats, and a seated figure of Osiris in bronze of the usual twenty-sixth dynasty type. One can only, therefore, judge these remains from internal evidence. None of the cats have collars engraved on their necks, nor are their ears pierced for earrings. They are all more or less life-like images of the animal, without any accessories whatever. They sit more upright than the cats of Bubastis.

The big cat is the only one that need be described in any detail. She sits bolt upright (some eighteen and a half inches high), with her forelegs very straight and rigid, and her paws set close together. Her neck is long and perfectly cylindrical. Her head is practically a sphere, with a face patched on to the front. She is, in fact, almost the mathematical abstraction of a cat reduced to its simplest forms. The inside of her body is hollow, and in it the cat's mummy was buried. Only the unmistakable smell and a few scraps of mummy cloth remained behind when I first saw the creature. The whole thing, legs and all, was cast in one piece, the cores of clay, about which the forelegs are cast, being still inside them. The right leg has cracked; moisture has at some time found its way to the clay within, which has swollen and burst the whole limb wide open. An interesting feature about this cat is that the whole body of it was thinly plastered over with a fine coating of gesso, and that this was gilded. Alabaster eyes were

¹ There is a fine upright figure of Osiris in bronze at Leyden, which is plastered and gilt in a similar fashion.

also introduced. Most of the gilded gesso and one of the eyes remain. The maker of the cat did not intend it to be gilt. This is evident not only because the modelling of the face is entirely altered by the plaster, which is thereabouts quite thick, but because the whiskers were indicated by tooling about the mouth, and this tooling the gesso, before bits of it flaked off, entirely hid.

A cat buried with such exceptional magnificence can have been no ordinary beast. It seems hardly too much to assume that it was the temple cat of its day, the sacred animal of that *Speos Artemidos* which all travellers in Egypt go to see. As such, at all events, the owner finds pleasure in regarding it.

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WORKS BY THE SAME AUTHOR.

- The Woodcutters of the Netherlands in the Fifteenth Century.
 In Three Parts. (1) History of the Woodcutters. (2) Catalogue of the Woodcuts. (3) List of the Books containing Woodcuts. Cambridge University Press, 1884. 8vo.
- The Gallery of Art of the Royal Institution, Liverpool. With Twelve Autotypes. London and Liverpool, 1885. Folio.
- The Artistic Development of Reynolds and Gainsborough. With Illustrations. London, 1886. 8vo.
- Early Flemish Artists and their Predecessors on the Lower Rhine. With Twenty-nine Illustrations. London, 1887. 8vo.
- Exhibition of Reproductions of the Works of Raphael in the Walker Art Gallery, Liverpool: Catalogue of Raphael's known Drawings, Pictures and Frescoes. Liverpool, 1887.
- Literary Remains of Albrecht Dürer; with Transcripts from the British Museum Manuscripts, and Notes upon them by LINA ECKENSTEIN. Cambridge University Press, 1889. 8vo.
- Climbers' Guide to the Central Pennine Alps. London, 1890.
 Small 8vo.
- Climbers' Guide to the Eastern Pennine Alps. London, 1891. Small 8vo.

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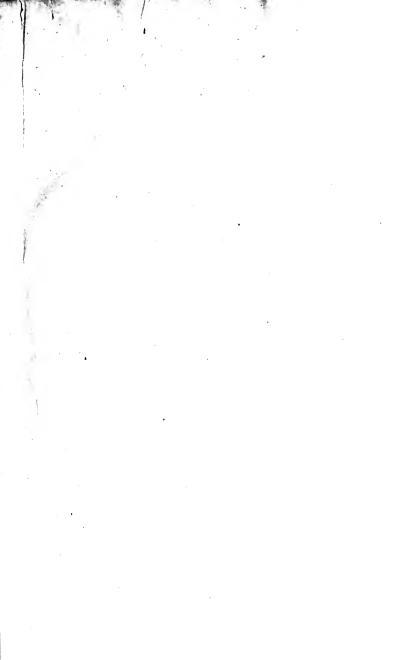
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