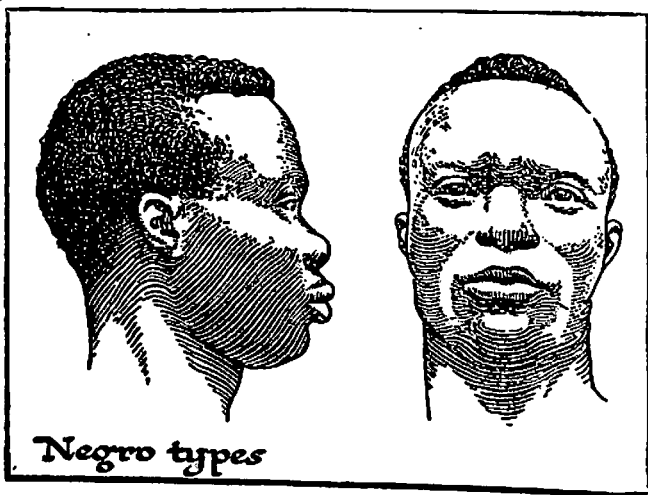


Bushwoman



Negro types

and about the Mediterranean there is a prevalence of white-skinned peoples with dark eyes and black hair. These dark white people seem to be a central mass of people passing by almost insensible gradations northward, eastward and southward into the more specialized whites and yellows and the divergent blacks. The black hair of many of these dark whites is straight, but never so strong and waveless as the hair of the yellow peoples. It is straighter in the east than in the west. In southern India we find brownish and darker peoples with straight black hair, and these as we pass eastward give place to more distinctly yellow peoples.

In scattered islands and in Papua and New Guinea we find another series of black and brownish peoples of a more lowly type with frizzy hair.

But it must be borne in mind that these are very loose-fitting generalizations. Some of the areas and isolated pockets of mankind in the Asiatic area may have been under conditions more like those in the European area; some of the African areas are of a more Asiatic and less distinctively African type. We find a wavy-haired, fairish, hairy-skinned race, the Ainu, in Japan. They are more like the Europeans in their facial type than the surrounding yellow Japanese. They may be a drifted patch of the whites or they may be a quite distinct people. We find primitive black people in the Andaman Islands far away from Australia and far away from Africa. There is a streak of very negroid blood traceable in south Persia and some parts of India. These are the "Asiatic" negroids.

There is little or no proof that all black people, the Australians, the Asiatic negroids and the negroes, derive from one origin, but only that they have lived for vast periods under similar conditions. Possibly the more ancient races of men were all dusky or black, and fairness is new. We must not assume that human beings in the eastern Asiatic area were all differentiating in one direction and all the human beings in Africa in another. There were great currents of tendency, it is true, but there were also backwaters, eddies, admixtures, readmixtures, and leakages from one main area to the other. A coloured map of the world to show the races would not present just four great areas of colour; it would have to be dabbed over with a multitude of tints and intermediate shades, simple here, mixed and overlapping there.

In the early Neolithic Period in Europe—it may be 10,000 or 12,000 years ago or so—*Homo sapiens* was differentiating all over the world, and he had already differentiated into a number

of varieties, but he has never differentiated into different *species*. The only other species of *Homo*, the Neanderthaler, was exterminated before history began. A "species," we must remember, in biological language is distinguished from a "variety" by the fact that varieties can interbreed, while species either do not do so or produce offspring which, like mules, are sterile. All mankind can interbreed freely, can learn to understand the same speech, can adapt itself to co-operation. And, in the present age, man is probably no longer undergoing differentiation at all. Readmixture is now a far stronger force than differentiation. Men mingle more and more. Mankind from the view of a biologist is an animal species in a state of arrested differentiation and possible readmixture.

## § 2

### *The Main Races of Mankind.*

It is only in the last fifty or sixty years that the varieties of men came to be regarded in this light, as a tangle of differentiations recently arrested or still in progress. Before that time students of mankind, influenced, consciously or unconsciously, by the story of Noah and the Ark and his three sons, Shem, Ham, and Japheth, were inclined to classify men into three or four great races, and they were disposed to regard these races as having always been separate things, descended from originally separate ancestors. They ignored the great possibilities of blended races and of special local isolations and variations. The classification has varied considerably, but there has been rather too much readiness to assume that mankind *must* be completely divisible into three or four main groups. Ethnologists (students of race) have fallen into grievous disputes about a multitude of minor peoples, as to whether they were of this or that primary race, or "mixed," or strayed early forms, or what not. But all races are more or less mixed. There are, no doubt, four main groups, but each is a miscellany, and there are little groups that will not go into any of the four.

Subject to these reservations, when it is clearly understood that when we speak of these main divisions we mean not simple and pure races, but groups of races, then they have a certain convenience in discussion. Over the European and Mediterranean area and western Asia there are, and have been for many thousand years, white peoples usually called the CAUCASIANS, subdivided into two or three subdivisions, the northern blonds or Nordic race, an alleged intermediate race about which many

Caucasian types



Mediterranean  
(Jew of Algiers)



Nordic  
(Englishman)



Mediterranean  
(Berber) J.F.H.

authorities are doubtful, the so-called Alpine race, and the southern dark whites, the Mediterranean or Iberian race; over eastern Asia and America a second group of races prevails, the MONGOLIANS, generally with yellow skins, straight black hair, and sturdy bodies; over Africa the NEGROES, and in the region of Australia and New Guinea the black, primitive AUSTRALOIDS. These are convenient terms, provided the student bears in mind that they are not exactly defined terms. They represent only the common characteristics of certain main groups of races; they leave out a number of little peoples who belong properly to none of these divisions, and they disregard the perpetual mixing where the main groups overlap.

Whether the "Caucasian" race is to be divided into two or three main subdivisions depends upon the classificatory value to be attached to certain differences in the skeleton and particularly to the shape of the skull. The student in his further reading will meet with constant references to round-skulled (Brachycephalic) and long-skulled (Dolichocephalic) peoples. No skull looked at from above is completely round, but some skulls (the dolichocephalic) are much more oblong than others: when the width of a skull is four-fifths or more of its length from back to front, that skull is called brachycephalic; when the width is less than four-fifths of the length the skull is dolichocephalic.

While some ethnologists regard the difference between brachycephaly and dolichocephaly as a difference of quite primary importance, another school which the writer must confess has entirely captured his convictions dismisses this as a mere secondary distinction. It seems probable that the skull shapes of a people may under special circumstances vary in comparatively few generations.

The skull shape of the Lombards, says Sir F. Petrie, changed from dolichocephalic to brachycephalic in a few hundred years; and Boas claims to have shown that the skull shapes of immigrants to the United States alter in one generation. We do not know what influences alter the shape of the skull, just as we do not know why people of British descent in the Darling region of Australia ("Cornstalks") grow exceptionally tall, or why in New England their jaw-bones seem to become sligher and their teeth in consequence rather crowded.

Even in Neolithic times dolichocephalic and brachycephalic skulls are found in the same group of remains and often buried together, and that is true of most peoples to-day. Some peoples, such as the mountain people of Central Europe, have more brachycephalic individuals per cent. than others; some, as the

Mongolian types



Kalmuck

J.F.H.



Chinese  
woman



Amerindian  
woman

Scandinavians, are more prevalently dolichocephalic. In Neolithic Britain and in Scandinavia the earliest barrows (tomb mounds) are long grave-shaped barrows and the late ones round, and the skulls found in the former are usually dolichocephalic and in the latter most frequently brachycephalic. This points, perhaps, to a succession of races in western Europe in the Neolithic Period, but it may also point to changes of diet, habit or climate.

But it is this study of skull shapes which has led many ethnologists to divide the Caucasian race not, as it was divided by Huxley, into two, the northern *blonds* and the Mediterranean and North African *dark whites* or brunets, but into three. They split his blonds into two classes. They distinguish a northern European type, blond and dolichocephalic, the Nordic; a Mediterranean or Iberian race, the dark whites, which is dark-haired and dolichocephalic; and between these two they describe this third race, their brachycephalic race, the Alpine race.

The opposite school would treat the alleged Alpine race simply as a number of local brachycephalic varieties of Nordic or Iberian (dark white) peoples. The Iberian peoples were the Neolithic people of the long barrows and seem at first to have pervaded most of Europe and Western Asia. They dominate early history. The Nordic people appear later, coming from the forests and west and central coasts of North Europe and Asia.

### § 3

#### *The Brunet Peoples.*

The Mediterranean or Iberian division of the Caucasian race had a wider range in early times, and was of a less specialized and distinctive type than the Nordic. It is very hard to define its southward boundaries from the Negro, or to mark off its early traces in Central Asia from those of early Mongolians. Wilfred Scawen Blunt says that Huxley "had long suspected a common origin of the Egyptians and the Dravidians of India, perhaps a long belt of brown-skinned men from India to Spain in very early days."

This "belt" of Huxley's, of dark-white and brown-skinned men, this race of brunet-brown folk, spread even farther than India; they reached to the shores of the Pacific, and they were everywhere the original possessors of the Neolithic culture and the beginners of what we call civilization. It is possible that these Brunet peoples are, so to speak, the *basic* peoples of our modern world. The Nordic and the Mongolian peoples may have been

but north-western and north-eastern branches from this more fundamental stem. Or the Nordic race may have been a branch, while the Mongolian, like the Negro, may have been another equal and distinct stem with which the brunet-browns met and mingled in South China. Or the Nordic peoples also may have developed separately from a Palæolithic stage. Griffith Taylor seems to think that the Mongolian type developed from what he calls an "Aryan" type, which was the common basis of both Mongolian and Nordic races. All these are open questions still, and may remain open for many years.

Mr. Horrabin and the writer have been at some pains to make a diagram that will summarize all this matter about human races, and we have contrived one that, so far as Europe, Asia, Australasia and North Africa goes, might almost be superimposed upon a map. We give (on p. 143) a genealogical stem showing the blood relationship between *Homo sapiens* and the chief sub-human species.

Then we have inserted a remark, so to speak, about the Cro-Magnon and Grimaldi types. It is based on certain differences, that may possibly have been exaggerated, among some Palæolithic skeletons in Europe. The Grimaldi bones had negroid traits. They suggested a race more like the more primitive Boskop race than the Red-Indian-like Cro-Magnon peoples. It is possible that two main races wandered over the same areas, one a proto-yellow-white race and the other a proto-negroid race. Accordingly the reader will note that the negroid and negro races are shown as first branching from the main stem, and then while the great body of humanity is represented by the dark-whites, two branches are shown of peoples going apart, the one towards the northern forests and the other towards the wind-blown sands of north-eastern Asia to develop the Nordic and Mongolian types respectively.

If the reader will glance again at the preceding paragraph, he will see that he may exercise a wide choice in varying the point at which either of these branches comes off from the main, the Brunet, stem. It is not suggested that either of these types, the Nordic or the Mongolian, except perhaps in the case of the Scandinavians and Esquimaux, have remained at all "pure." The branches turn back in our diagram to meet other branches and suggest racial admixture.

Moreover, our diagram is peppered with notes of interrogation, and, so-seasoned, it probably comes much nearer the truth of racial relationships than any hard and exact classification of races can possibly do.



## § 4

*The So-called "Heliolithic" Culture.*

At some period in human history (it is suggested in Elliot Smith's *Migrations of Early Culture*) there seems to have been a special type of Neolithic culture widely distributed in the world, which had a group of features so curious and so unlikely to have been independently developed in different regions of the earth as to compel us to believe that it was in effect one culture. It reached through all the regions inhabited by the brunet Mediterranean race, and beyond through India, Further India, up the Pacific coast of China, and it spread at last across Mexico and Peru. It was a coastal culture.

This peculiar Neolithic culture, called the *heliolithic* included many or all practices: (1) circum-

*The Swastika*

custom of sending the child is born known as the *couvade*, (3) the practice of massage, (4) the making of mummies, (5) megalithic monuments (e.g. Stonehenge), (6) artificial deformation of the heads of the young by bandages, (7) tattooing, (8) religious association of the sun and the serpent, and (9) the use of the symbol known as the swastika for good luck. This odd little symbol spins gaily round the world; it seems incredible that men would have invented and made a pet of it twice over.

Elliot Smith traces these associated practices in a sort of constellation all over this great Mediterranean-Indian Ocean-Pacific area. Where one occurs, most of the others occur. They link Brittany with Borneo and Peru. But this constellation of practices does not crop up in the primitive homes of Nordic or Mongolian peoples, nor does it extend southward much beyond equatorial Africa.

For thousands of years, from 15,000 to 1,000 B.C., such a heliolithic Neolithic culture and its brownish possessors may have been oozing round the globe through the warmer regions of the world, drifting by canoes often across wide stretches of sea. It was then the highest culture in the world; it sustained the longest, most highly developed communities. And its region of origin may have been, as Elliot Smith suggests, the Mediterranean and North-African region.



It migrated slowly age by age. It must have been spreading up the Pacific coast and across the island stepping-stones to America long after it had passed on into other developments in its areas of origin. Many of the peoples of the East Indies, Melanesia and Polynesia were still in this heliolithic stage of development when they were discovered by European navigators in the eighteenth century. The first civilizations in Egypt and the Euphrates-Tigris valley probably developed directly out of this widespread culture. We will discuss later whether the Chinese civilization had a different origin.

The Semitic nomads of the Arabian desert seem also to have had a heliolithic stage.

### § 5

#### *The American Indians.*

The original American population belonged to the Mongolian race, and seems to have reached the American continent by way of Bering Strait at a Palæolithic stage of development. (There is still a coming and going of skin boats between the two continents.)

Later (though this is a matter for discussion among ethnologists) fresh elements of population and fresh cultural ideas at the heliolithic level may have reached America by sea.

If there were these later ingredients in the American population, then either they brought no wheat with them or it died out. Maize, the corn of the new world, is a different plant altogether from any known in the old world. But the religious life of the American peoples betray the same entanglement of the idea of sowing with a human sacrifice that prevailed throughout the Neolithic Period in the old world.

The American tribes over the great part of the continent remained at a level of Neolithic barbarism. Over acres of seasonal grass they became nomadic, following the bison. In the far north they followed the caribou, the American reindeer. (The horse did not exist on the American continent in the human period until it was introduced by the Europeans.) In the tropical forests the American Indians became hunters of birds and small game. But in one or two fertile regions, as we shall note later, they developed a more elaborate social order, irrigated, erected important buildings of stone, which were adorned with elaborate carvings of highly conventionalized and often fantastic design, and founded cities and empires.



## CHAPTER 12

# THE LANGUAGES OF MANKIND

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|--|--|
| § 1. <i>No One Primitive Language.</i> | § 6. <i>The Chinese Languages.</i>               |
| § 2. <i>The Aryan Languages.</i>       | § 7. <i>Other Language Groups.</i>               |
| § 3. <i>The Semitic Languages.</i>     | § 8. <i>A Possible Primitive Language Group.</i> |
| § 4. <i>The Hamitic Languages.</i>     | § 9. <i>Some Isolated Languages.</i>             |
| § 5. <i>The Ural-Altai Languages.</i>  |  |

### § 1

It is improbable that there was ever such a thing as a common human language. We know nothing of the language of Palæolithic man; we do not even know whether Palæolithic man talked freely.

We know that Palæolithic man had a keen sense of form and attitude, because of his drawings; and it has been suggested that he communicated his ideas very largely by gesture. Probably such words as the earlier men used were mainly cries of alarm or passion or names for concrete things, and in many cases they were probably imitative sounds made by or associated with the things named. Sir Arthur Evans has suggested that in America sign-language arose before speech, because the sign-language is common to all Indians in North America, whereas the languages are different.

The first languages were probably small collections of interjections and nouns. Probably the nouns were said in different intonations to convey different meanings. If Palæolithic man had a word for "horse" or "bear," he probably showed by tone or gesture whether he meant "bear is coming," "bear is going," "bear is to be hunted," "dead bear," "bear has been here," "bear did this," and so on.

Only very slowly did the human mind develop methods of indicating action and relationship in a formal manner. Modern languages contain many thousands of words, but the earlier languages could have consisted only of a few hundred. It is said that even modern European peasants can get along with

something less than a thousand words, and it is quite conceivable that so late as the Early Neolithic Period that was the limit of the available vocabulary. Probably men did not indulge in those days in conversation or description. For narrative purposes they danced and acted rather than told. Their powers of counting, even, seem to have been very limited.

The growth of speech was at first a very slow process indeed, and grammatical forms and the expression of abstract ideas may have come very late in human history, perhaps only 400 or 500 generations ago.

## § 2

### *The Aryan Languages.*

The students of languages (philologists) tell us that they are unable to trace with certainty any common features in all the languages of mankind. They find over great areas groups of languages which have similar root words and similar ways of expressing the same idea, but then they find in other areas languages which appear to be dissimilar down to their fundamental structure, which express action and relation by entirely dissimilar devices, and have an altogether different grammatical scheme.

One great group of languages now covers nearly all Europe and stretches out to India; it includes English, French, German, Spanish, Italian, Greek, Russian, Armenian, Persian, and various Indian tongues. It is called the Indo-European or ARYAN family. The same fundamental roots, the same grammatical ideas, are traceable through all this family. Compare, for example, English *father*, *mother*, German, *vater*, *mutter*, Latin *pater*, *mater*, Greek *pater*, *meter*, French *père*, *mère*, Armenian *hair*, *mair*, Sanscrit *pitar*, *matar*, etc., etc. In a similar manner the Aryan languages ring the changes on a great number of fundamental words, *f* in the Germanic languages becoming *p* in Latin, and so on. They follow a law of variation called Grimm's Law. These languages are not different things, they are variations of one thing. The people who use these languages think in the same way.

At one time in the remote past, in the Neolithic Age, that is to say 8,000 years or more ago, there may have been one simple original speech from which all these Aryan languages have differentiated. Somewhere between Central Europe and Western Asia there must have wandered a number of tribes sufficiently

intermingled to develop and use one tongue. It is convenient here to call them the Aryan peoples. Sir H. H. Johnston has called them "Aryan Russians." They belonged mostly to the white group of races and to the blond and northern subdivision of the group—to the Nordic race, that is.

Here one must sound a note of warning. There was a time when the philologists were disposed to confuse languages and races, and to suppose that people who once all spoke the same tongue must be all of the same blood. That, however, is not the case, as the reader will understand if he will think of the negroes of the United States who now all speak English, or of the Irish who—except for purposes of political demonstration—no longer speak the old Erse language, or of the Cornish people who have lost their ancient Keltic speech. But what a common language does do, is to show that a common intercourse has existed, and the possibility of intermixture; and if it does not point to a common origin, it points at least to a common future.

But even this original Aryan language, which was a spoken speech—perhaps 6,000 or 5,000 B.C., was by no means a *primordial* language or the language of a savage race. Its earliest speakers were at or past the Neolithic stage of civilization. It had grammatical forms and verbal devices of some complexity. The vanished methods of expression of the later Palæolithic peoples, of the Azilians, or of the early Neolithic kitchen-midden people for instance, were probably cruder than the most elementary form of Aryan.

Probably the Aryan group of languages became distinct in a wide region of which the Danube, Dnieper, Don and Volga were the main rivers, a region that extended eastward beyond the Ural Mountains north of the Caspian Sea. The area over which the Aryan speakers roamed probably did not for a long time reach to the Atlantic or to the south of the Black Sea beyond Asia Minor. There was no effectual separation of Europe from Asia then at the Bosphorus. The Danube flowed eastward to a great sea that extended across the Volga region of south-eastern Russia right into Turkestan, and included the Black, Caspian, and Aral Seas, of to-day. Perhaps it sent out arms to the Arctic Ocean. It must have been a pretty effective barrier between the Aryan speakers and the people in north-eastern Asia.

South of this sea stretched a continuous shore from the Balkans to Afghanistan. North-west of it a region of swamps and lagoons reached to the Baltic.

## § 3

*The Semitic Languages.*

Next to Aryan, philologists distinguish another group of languages which seem to have been made quite separately from the Aryan languages, the Semitic. Hebrew and Arabic are kindred, but they seem to have even a different set of root words from the Aryan tongues; they express their ideas of relationship in a different way; the fundamental ideas of their grammars are different. They were in all probability made by human communities quite out of touch with the original Aryans, separately and independently.

Hebrew, Arabic, Abyssinian, ancient Assyrian, ancient Phœnician, and a number of associated tongues are put together as being derived from this second primary language, which is called the SEMITIC.

In the very beginnings of recorded history—that is, by 4,000 B.C. and earlier—we find Aryan-speaking peoples and Semitic-speaking peoples carrying on the liveliest intercourse of war and trade around and about the eastern end of the Mediterranean, but the fundamental differences of the primary Aryan and primary Semitic languages oblige us to believe that in Neolithic times, before the historical period there must for thousands of years have been an almost complete separation of the Aryan-speaking and the Semitic-speaking peoples.

The later seem to have lived either in south Arabia or in north-east Africa. In the early Neolithic Age the original Semitic speakers and the original Aryan speakers were probably living, so to speak, in different worlds.

## § 4

*The Hamitic Languages.*

Philologists speak with less unanimity of a third group of languages, the HAMITIC, which some declare to be distinct from, and others allied to, the Semitic. The weight of opinion inclines now towards the idea of some primordial connection of these two groups.

The Hamitic group is certainly a much wider and more various language group than the Semitic or the Aryan, and the Semitic tongues are more of a family, have more of a common likeness, than the Aryan. The Semitic languages may have arisen as some specialized proto-Hamitic group, just as the birds arose from one



special group of reptiles, and the Aryan also from another proto-Hamitic group, as the mammals did from another group of reptiles. It is a very tempting speculation, but one for which there is really no basis of justifying fact, to suppose that the rude primordial ancestor group of the Aryan tongues branched off from the proto-Hamitic speech forms at some still earlier date than the separation and specialization of Semitic.

The Hamitic speakers to-day, like the Semitic speakers, are mainly of the Mediterranean race. Among the Hamitic languages are the ancient Egyptian and Coptic, the Berber languages (of the mountain people of North Africa, the Masked Tuaregs, and other such peoples), and what are called the Ethiopic group of African languages in eastern Africa, including the speech of the Gallas and the Somalis. These Hamitic languages may have radiated from a centre on the African coast of the Mediterranean, and they may have extended over the then existing land connections very widely into western Europe.

All these three great groups of languages, the Aryan, Semitic, and Hamitic, it may be noted, have one feature in common which they do not share with any other language, and that is grammatical gender; but whether that has much weight as evidence of a remote common origin of Aryan, Semitic and Hamitic is a question for the philologist rather than for the general student. It does not affect the clear evidence of a very long and very ancient prehistoric separation of the speakers of these three diverse groups of tongues.

The Semitic and Nordic "races" have a much more distinctive physiognomy; they seem, like their characteristic languages, to be more marked and specialized than the broader, more fundamental Hamitic-speaking peoples.

## § 5

### *The Ural-Altai Languages.*

Across to the north-east of the Aryan and Semitic areas there must once have spread a further distinct language system which is now represented by a group of languages known as the **TURANIAN**, or **URAL-ALTAIC** group. This includes the Lappish of Lapland and the Samoyed speech of Siberia, the Finnish language, Magyar, Turkish or Tartar, Manchu and Mongol; it has not as a group been so exhaustively studied by European philologists, and there is insufficient evidence yet whether it does or does not include the Korean and Japanese languages. H. B. Hulbert

has issued a comparative grammar of Korean and certain of the Dravidian languages of India to demonstrate the close affinity he finds between them.

## § 6

*The Chinese Languages.*

A fifth region of language formation was south-eastern Asia, where there still prevails a group of languages consisting of monosyllables without any inflections, in which the tone used in uttering a word determines its meaning. This may be called the Chinese or MONOSYLLABIC group, and it includes Chinese, Burmese, Siamese and Tibetan.

The difference between any of these Chinese tongues and the more western languages is profound. In the Pekinese form of Chinese there are only about 420 primary monosyllables, and consequently each of these has to do duty for a great number of things, and the different meanings are indicated either by the context or by saying the word in a distinctive tone.

The relations of these words to each other are expressed by quite different methods from the Aryan methods. Chinese grammar is a thing different in nature from English grammar; it is a separate and different invention. Many writers declare there is no Chinese grammar at all, and that is true if we mean by grammar anything in the European sense of inflections and concords. Consequently, any such thing as a literal translation from Chinese into English is an impossibility. The very method of the thought is different. Their philosophy remains still largely a sealed book to the European on this account, and vice versa, because of the different nature of the expressions.

We may give an illustration of this profound difference in method. The four Chinese characters indicating "Affairs, query, imperative, old," placed in that order, for example, represent "Why walk in the ancient ways?" The Chinaman thus gives the bare cores of his meaning; the Englishman gets to the same sense by a bold metaphor. He may be talking of conservatism in cooking or in bookbinding, but he will say: "Why walk in the ancient ways?"

Mr. Arthur Waley, in the interesting essay on Chinese thought and poetry which precedes his book, *170 Chinese Poems* (Constable, 1918), makes it clear how in these fields Chinese thought is kept practical and restricted by the limitations upon metaphor that are imposed by the contracted structure of Chinese.

## § 7

*Other Language Groups.*

In addition to these families of languages, the following other great language groups are distinguished by the philologist. All the American-Indian languages, which vary widely among themselves, are separable from any Old World group. Here we may lump them together not so much as a family as a miscellany.

There is one great group of languages in Africa, from a little way north of the equator to its southern extremity, the BANTU, and in addition a complex of other languages across the centre of the continent about which we will not trouble here.

There are also two probably separate groups, the DRAVIDIAN in South India, and the MALAYO-POLYNESIAN stretched over Polynesia and also now including Indian tongues.

Now, it seems reasonable to conclude from these fundamental differences that about the time when men were beginning to form rather larger communities than the family tribe, when they were beginning to tell each other long stories and argue and exchange ideas, human beings were distributed about the world in a number of areas which communicated very little with each other. They were separated by oceans, seas, dense forests, deserts or mountains from one another. There may have been in that remote time, it may be 10,000 years ago or more, Aryan, Semitic, Hamitic, Turanian, American and Chinese-speaking tribes and families, wandering over their several areas of hunting, pasture and occasional cultivation, all at very much the same stage of culture, and each developing its linguistic instrument in its own way. Probably each of these original tribes was not more numerous altogether than the Indians in North-west Territories to-day. Systematic agriculture was barely beginning then, and until agriculture made a denser population possible all the human beings in the world may have numbered only a few score thousand. It is a point that few people grasp, that until the Later Palæolithic Age man was an extremely rare animal. If agriculture was becoming at all important in human life, and if at that time population was anywhere denser, it was probably in the Mediterranean region, and possibly in areas now submerged.

In addition to these Neolithic tribes there must have been various still more primitive forest folks in Africa and in India. These could only have numbered a few thousand. They were probably as rare as, or rarer than, the gorilla is now. Central

Africa, from the Upper Nile, was then a vast forest, impenetrable to ordinary human life, a forest of which the Congo forests of to-day are the last shrunken remains.

Possibly the spread of men of a race higher than primitive Australoids into the East Indies and the development of the languages of the Malayo-Polynesian type came later in time than the origination of these other language groups. The Polynesian seems to be a late eastward extension of the Brunet peoples, probably with an infiltration of Nordic blood.

The language divisions of the philologist do tally, it is manifest, in a broad sort of way with the main race classes of the ethnologist, and they carry out the same idea of a very small and thinly distributed human population and of age-long separations between the great divisions of mankind. In the Glacial Age, ice, or at least a climate too severe for the free spreading of peoples, extended from the north pole into Central Europe and across Russia and Siberia to the great tablelands of Central Asia. After the last Glacial Age, this cold north mitigated its severities very slowly, and was for long without any other population than the wandering hunters who spread eastward and across Bering Strait. North and Central Europe and Asia did not become sufficiently temperate for agriculture until quite recent times—times, that is, within the limit of 12,000 or possibly even 10,000 years ago—and a dense forest period intervened between the age of the hunter and the agricultural clearings.

This forest period was also a very wet period. It has been called the Pluvial or Lacustrine Age, the rain or pond period. It has to be remembered that the outlines of the land of the world have changed greatly even in the last hundred centuries. Nothing is so frequently overlooked by the students of pre-historic man as geographical change.

Across European Russia, from the Baltic to the Caspian Sea, as the ice receded there certainly spread much water and many impassable swamps; the Caspian Sea and the Sea of Aral and parts of the Desert of Turkestan are the vestiges of a great extent of sea that reached far up to the Volga valley and sent an arm westward to join the Black Sea. Mountain barriers much higher than they are now, and the arm of the sea that is now the region of the Indus, completed the separation of the early Nordic races from the Mongolians and the Dravidians, and made the broad racial differentiation of those groups possible.

Again, the blown-sand Desert of Sahara—it is not a dried-up sea, but a wind desert, once fertile and rich in life, becoming more and more dry and sandy—cut the Mediterranean race off